

**APPROVAL
TO DRILL A
WELL**

Exploratory ☐
Development ☐Delineation ☐
Service ☒

APPROVAL TO DRILL A WELL

This application is submitted under Section 82 of the *Canada Oil and Gas Drilling Regulations*. When approved under Section 83 of the *Regulations*, it is the requisite approval for the commencement of drilling operations.

Well Name: Aurora Training Well Inuvik G-53
Operator: Aurora College, Inuvik Drilling Program No.: n/a
Contractor: Akita Equiak Interest Identifier: n/a
Drilling Rig or Unit: #15 Estimated Well Cost: \$850,000
Location-Unit: G Section: 53 Grid Area: 6830-13330
Coordinates: Lat.: 68°22'28.04" Long.: 133°43'08.47"
Area: Inuvik Field / Pool: n/a
Elevation-KB/RT: 22.605m (ASL) GL / Seafloor: 17.905m
Approx. Spud Date: July 28, 2001 Est. Days on Location: 40
Anticipated Total Depth: 450m Target Horizons: n/a

EVALUATION PROGRAM

Ten-metre sample intervals n/a
Five-metre sample intervals from surface casing to TD
Canned sample intervals from surface casing to TD
Conventional cores at none
Logs and Tests Gamma Ray, Neutron Density to TD; Temperature and Caliper to TD

CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)	Cementing
<u>610</u>	<u>refrigerated conductor casing</u>		<u>20</u>	<u>8.5</u>
<u>244.5</u>	<u>79.62</u>	<u>DST 80LT</u>	<u>150</u>	<u>16.5</u>
<u>178</u>	<u>47.62</u>	<u>DST 80LT</u>	<u>450</u>	<u>6.7</u>

B.O.P. Equipment: diverter on 16" casing
Akita BOP on 9.5/8" surface casing. BOP consists of Hydril GK 11" 3m Annular,
2 X Shaffer 9" LWP 3m Single Gate Blind/Pipe Rams, 21 Mpa choke manifold
Other Information: The well is being drilled to be used as a training facility for students from the
Northwest Territories, the Yukon Territory and Nunavut

Signed: [Signature] Title: Vice President
Responsible Officer
Name: Lorne Hammer Company: Canadian Petroleum Engineering Inc.
Date: July 25, 2001 Phone: (403) 263-0752

APPROVAL

An approved copy of this notice is to be posted at each wellsite.

Date: July 27/01 Signed: [Signature]
File: 6311-A72-1-1 Chief Conservation Officer
WID: 1915
UWI: 300G536830133300

Application
To
Change A Well Name



WID - N° d'id. du puits

1915

APPLICATION TO CHANGE A WELL NAME
DEMANDE DE MODIFICATION DU NOM D'UN Puits

Application is made hereby to change the name of a well, recorded in the Name Register as -
Nous demandons l'autorisation de modifier le nom d'un puits, inscrit au répertoire des puits sous le nom de -

Old Name - Ancien nom:

Aurora Training Well Inuvik G-53

Proposed new name - Nouveau nom proposé:

Aurora Training Well Inuvik G-04

WELL LOCATION - EMPLACEMENT DU Puits

Location: Emplacement:	Unit - Unité G	Section 04	Grid Area - Étendue quadrillée 68° 30'
	Latitude 68° 23' 25.9" N		Longitude 133° 45' 42.2" W

Unique Well Identifier - Code de l'ordinateur

300604683013345D

Reason(s) for Changing Well Name - Motif(s) de modification du nom du puits

Coordinates of well were different upon
surveying.

Date at: this day of

Daté à: ce jour de

Signed by - Signé par

Title - Titre

Company - Société

NEB USE ONLY - USAGE DE NEB SEUL

This application has been examined and approved by:

APPROVED - APPROUVÉ

Demande étudiée et approuvée par:

Date - Date

Chief Conservation Officer - Délégué à l'exploitation

Nov. 28/01

J. M. Baker

444 Seventh Avenue SW
Calgary, Alberta T2P 0X8444 Septième Avenue S.-O.
Calgary (Alberta) T2P 0X8

Canada

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**WELL
TERMINATION
RECORD**



TERMINATION RECORD

This record is submitted in compliance with Section 314 of the Canada Oil and Gas Drilling Regulations.

Well Name: Aurora Training Well Inuvik G-04 Area: Inuvik
Grid Area: 6830-13330 Field / Pool: n/a
Interest: n/a Final Coordinates: Lat: 68°23'25.9" N Long: 133°45'42.2" W
Drilling Unit: Akita Rig 15 Elevations-KB/RT: 25.3 m KB (ASL) GL/Seaflo 20.21 m
Spud Date: 7/30/01 R.R.: 8/25/01 Total Depth: 401 m
O.D. (mm) Weight (kg/m) Grade Depth Set (m KB) Cement (m³)
610 Refrigerated Conductor Pipe 18 3.75
244.5 79.62 DST-80LT 155 9.5
178 47.62 DST-80LT 399.5 5.5

PLUGGING PROGRAM

Approval of the following program was obtained by (person) n/a
from (person) of the
by means of on
Type of Plug Interval (m KB) Felt Cement (m³)

178 mm casing was run to 399.5 m KB and cemented full length. Good cement returns were observed at surface.

The 178 mm casing was not drilled out. Wellhead installed on casing to facilitate Service Rig Training.

Lost Circulation/Overpressure Zones: None

Equipment left on Seafloor (Describe): None

Provision for Re-entry (Describe and attach sketch): FMC 21 mPa wellhead (244 x 279 mm) installed on casing

Cores: none Type: Intervals:

Other Downhole Suspension Equipment: None

CERTIFICATION

I certify on the basis of personal knowledge of operations undertaken at the above named well that the above information is accurate.

Signed: Lorne G. Hammer Title: Vice President
Name: Lorne G. Hammer Date: 11/26/01
Company: Canadian Petroleum Engineering Inc.

Well Status

Suspended ☐
Abandoned ☐

Acknowledged by:

Chief Conservation Officer

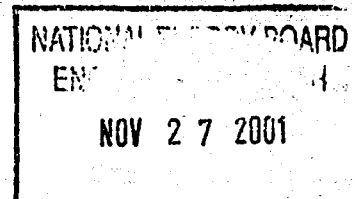
File: 9311-A72-1-1

WID: 1915

UWI: 300G046830133300

Date: May 27/02

FINAL WELL REPORT



FINAL WELL REPORT

N.E.B. COPY

**AURORA COLLEGE
INUVIK, NWT**

AURORA TRAINING WELL INUVIK G-53

Grid # 6830-13330

DATE: 9/4/01

**Company Representative: Lorne Hammer,
Canadian Petroleum Engineering Inc.**

	1	INTRODUCTION
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E. ENVIRONMENTAL WELL ANALYSIS
No Incidents

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A. INTRODUCTION

Aurora College drilled a 400 meter test well spudded on 7/30/01 and finishing on 8/4/01 to provide a training facility in the town site of Inuvik that would be used for training of Northwest Territories residents in safe oilfield practices. Stakeholders from Inuvik, PITS, CAPP, Aurora College and Akita Drilling were in support of the test well. Aurora College approached stakeholders in the oil and gas industry and government and received wholehearted support from all groups.

The drilling contractor was Akita Equitak based out of Inuvik. Akita Equitak is a joint venture between the Inuvialuit Regional Corporation and Akita Drilling Ltd. The drilling rig used was Akita Rig # 15, the rig that will be used by Japex et al to drill the Mallik 3L-38 Methane Hydrate Research Well on Richards Island this upcoming winter. Akita Rig #15 is rated to drill to 2000 meters. The rig has a 66 m³ mud system and is equipped with two boilers, one is rated at 100 HP and the other rated at 80 HP.

The well was drilled on a site located within the town boundaries of Inuvik on Lot # 1001, Quad 107 B/7 LTO 1227. The lot was leased to Aurora College for a ten (10) year period by the Municipal Corporation of the town of Inuvik for the training facility.

The exact coordinates of the well are:

Latitude: 68° 23' 25.9" N.

Longitude: 133° 45' 42.2" N

Akita Rig #15 was moved onto the location on 7/29/01 following the setting of a 406 mm refrigerated conductor to a depth of 16 meters. The conductor casing was cemented with good mud and cement returns throughout the job with cement to surface. The diverter was nipped up and pressure tested, as was the remainder of the well control equipment. The refrigeration unit was run continuously until the 244 mm permafrost casing was set at 155 meters. No evidence of permafrost was seen, and the mud cooler was not run for the main section of the well.

The conductor shoe was drilled out with a 311 mm bit and the 311 mm surface hole was control drilled to 155 meters at a penetration rate of 15 m/hr. The permafrost protection string made up of 11 joints of Siderco 244 mm, 71.62 kg/m, DST 80 LT, BT&C casing was run to 155 meters and cemented with 13 tonnes of permafrost cement. The casing was rotated and reciprocated during cementing and good cement returns, approximately 0.5 m³ were circulated out at surface. The plug was bumped with 3000 kPa and the pressure held. The plug was down at 0522 on 8/1/01.

The BOP's were installed and the annular preventor pressure tested to 1400 and 10,000 kPa. The pipe rams, HCR, Choke manifold, kelly cock, stabbing valve, and kill lines were all tested to 1400 kPa and 10,000 kPa high. All of the equipment held for 10 minutes

without bleed off. The accumulator precharge bottles were checked and the accumulator function tested prior to drilling out.

The float collar and shoe were drilled out 8/2/01. A formation leak off test was not done due to the soft formation and 18 kPa /m was used for all well control calculations. The 216 mm hole was drilled from 155 meters to 340 meters without incident. At 340 meters, the penetration rate slowed from 10 meters/hr to approximately 5 to 6 meters /hr. Bit # 2 was tripped out at 349 meters and Bit # 3 run in. Bit #2 drilled from 349 meters to 401 meters at 5.1 m/hr.

After total depth was reached at 401 meters, Schlumberger logged the open hole. One log run was made and the following logs obtained from 401 m to 155 m: Temperature Log, Platform Express Array Induction - SP, Platform Express Compensated Neutron Litho Density, and a caliper-cement volume log.

Following the log run, a wiper trip was made in preparation for running casing. Thirty (30) joints of Siderco 178 mm, 47.62 kg/m, DST - 80 LT, BT&C casing was run to 397.5 meters. The casing was rotated and reciprocated while cementing and was cemented with 9 tonnes of permafrost cement with good cement returns to surface. The plug was bumped with 5000 kPa at 0930 on 8/4/01.

The rig was released at 1200 hours on 8/4/01 for use as the training facility. Aurora College in conjunction with PITS has conducted 4 introductory courses for floor hands and 76 personnel from the Northwest Territories have successfully completed the course. Akita Rig #15 was released by Aurora College on 8/25/01 at the completion of the floor hand training courses. The well was suspended with a FMC wellhead installed on the 178 mm casing to facilitate a service rig training course. The service rig training course started 08/30/01 and it is to be completed 09/8/01.

B. GENERAL DATA

1. Well Name: Aurora Training Well Inuvik G-53
Authority to Drill a Well No: 9311-A72-1-1
Exploration Agreement number: Not Applicable
Location Unit: G
Section: 53
Grid Area: 6830-13330
Classification: Service well
2. Well Location:
Coordinates: Latitude: 68° 23' 25.9" N
Longitude: 133° 45' 42.2" N
3. Unique Well Identifier: 300G536830133300
4. Operator: Aurora College
5. Contractor: Akita Equetak
6. Drilling Unit: Akita Rig #15
Diesel Electric land rig
7. Position Keeping: Not Applicable, land rig
8. Support Craft: Not Applicable, land rig
9. Drilling Unit performance: Very Good
10. Difficulties and delays: None
11. Total Well Cost \$850,000 budgeted
\$972,684 actual
\$625,000 donated by industry
12. Horizontal deviated wells: Not Applicable

C. SUMMARY OF DRILLING OPERATIONS**1. Elevations:**

Ground: 20.21 m (from Inukshuk Geomatics Survey)
KB: 25.3 m
KB to Casing Flange: 5.0 m

2. Total Depth:

FTD: 401 m KB
PBSD: 397.5 m KB
TVD: 401 m KB

3. **Date and Hour Spudded:** 2200; 07/30/01

4. **Date Drilling Completed:** 8/4/01

5. **Date of Rig Release:** 8/25/01

6. **Well Status:** Suspended

7. Hole Sizes and Depths:

Conductor Hole: 711 mm to 18 m KB
Surface Hole: 311 mm to 155 m KB
Main Hole: 216 mm to 401 m KB

8. Casing and Cementing Record:**Conductor Hole:**

Casing Size: 406 mm ID x 508 mm OD refrigerated

Casing Weight: N/A

Casing Grade: N/A

Casing Make: Northern Impact Energy Services

Number of Joints: 1

Thread: N/A

Depth Set: 18 m KB

Cut Height: At surface KB

Cut Off Depth: After abandonment

Date Set: 7/28/01

Cement Volume: 3.75 m³

Cement Type: Arctic set Cement (40%G + 60%Gypsum)

Additives: 12% DO44 salt
1% DO 65 Turbulence inducer
0.6% DO13 Retarder
0.2% DO46 Antifoam

Surface Hole

Casing Size: 244 mm
Casing Weight: 71.62 kg/m
Casing Grade: DST 80 LT
Casing Make: Siderco
Number of Joints: 11
Thread: BT&C
Depth Set: 155 m KB
Cut Height: At surface KB
Cut Off Depth: After abandonment
Date Set: 8/1/01
Cement Volume: 9.5 m³
Cement Type: Arctic set Cement
Additives: 12% DO44 salt
1% DO 65 Turbulence inducer
0.6% DO13 Retarder
0.2% DO46 Antifoam
Cement Top: Surface (17.905 m KB)
Casing Bowl Size: 279 x 244 mm x 21 mmPa
Casing Bowl Make: SF Crown Slip On

Main Hole

Casing Size: 178 mm
Casing Weight: 47.62 kg/m
Casing Grade: DST 80 LT
Casing Make: Siderco
Number of Joints: 30
Thread: BT&C
Depth Set: 397.5 m KB
Cut Height: At surface KB
Cut Off Depth: After abandonment
Date Set: 8/4/01
Cement Volume: 5.5 m³
Cement Type: Arctic set Cement
Additives: 12% DO44 salt
1% DO 65 Turbulence inducer
0.6% DO13 Retarder
0.2% DO46 Antifoam
Cement Top: Surface (17.905 M KB)

9. **Sidetracked Hole:** Not Applicable

10. Drilling Fluid:

Conductor Hole: Dry/Auger

Surface Hole:

Properties: Viscosity: 52 sec/l
 Weight: 1170 kg/m³
 PH: 9.0
 Solids: not available
 Gels: not available
 PV/YP: not available
 Filter Cake: not available

Main Hole:

Properties: Viscosity: 94 sec/l
 Weight: 1170 kg/m³
 PH: 11.0
 Solids: 14%
 Gels: 10.5/18
 PV/YP: 20/25.5
 Filter Cake: not available

11. Fishing Operations: not applicable**12. Well Kicks and Well Control Operations:** not applicable**13. Formation Leak off Tests:**

Leak Off test not conducted as the only casing that was drilled out was the conductor casing. As per regulations, Leak off test not required under conductor casing.

14. Time Distribution:

Date	Time	Activity
2001/07/30	00:00 - 22:00	Rig up Akita Rig 15
	22:00 - 24:00	Spud, Drill 311 mm hole to 32 m.
2001/07/31	00:00 - 00:15	Rig service
	00:15 - 01:15	Drill 32 -41 m.
	01:15 - 03:00	Work tight hole
	03:00 - 03:15	Survey
	03:15 - 17:30	Drill 41 - 144 m.
	17:30 - 20:30	Wiper Trip, Strap out
	20:30 - 22:30	Drill 144 - 155 m.
	22:30 - 23:15	Condition mud & circulate
	23:15 - 24:00	Trip out to run casing

2001/08/01	00:00 - 00:15	POOH to run casing
	00:15 - 05:15	Rigged up to and Ran 11 joints 244.9 mm casing
	05:15 - 06:30	Rig up to cement, held safety meeting, cemented 245 mm casing with good returns to surface
	06:30 - 13:00	WOC
	13:00 - 23:15	Cut casing, Weld on casing bowl, nipple up BOP's
	23:15 - 24:00	Pressure test manifold & Blind rams
2001/08/02	00:00 - 04:00	Pressure test BOP's and HCR's, all valves, kelly cocks
	04:00 - 04:15	BOP Drill
	04:15 - 08:00	Drill 216 mm hole from 155 m to 164 m
	08:00 - 08:45	Trip for mud ring
	08:45 - 09:00	BOP Drill
	09:00 - 23:45	Drill 164 m to 349 m
	23:45 - 24:00	Condition mud & circulate
2001/08/03	00:00 - 03:15	POOH for new bit
	03:15 - 14:00	Drill from 349 m to 401 mm
	14:00 - 14:15	Condition mud & circulate
	14:15 - 15:45	POOH to log w/Schlumberger
	15:45 - 19:00	Run Temp, Caliper, Array Induction-SP, Comp. Neutron Litho-density logs
	19:00 - 23:15	RIH, Condition mud & circulate, POOH to run casing
	23:15 - 24:00	Rig to & run casing
2001/08/04	00:00 - 04:00	Run 178 mm casing
	04:00 - 08:00	Wait on circulating swedge
	08:00 - 08:45	Run casing to 397.5 m
	08:45 - 09:00	Safety meeting w/ Schlumberger cementers
	09:00 - 10:00	Cement 178 mm casing to surface
	10:00 - 12:00	Set Slips and cut casing
	12:00	Rig Release

Time Breakdown:

<u>Activity</u>	<u>Hours</u>
Drilling	46.5
Surveying	2
Circulating	2.75
Cementing	1.25
WOC	6.5
Rig Service	2.25
Rig Repair	0
Tripping, reaming	15.25
Running Casing	13.5
Rig Up	34

Nipple Up/Test BOP's	15.5
Safety mtg/BOP Drills	2
Well Evaluation	2.75

15. Deviation Survey:

Depth (Meters)	Inclination (Degrees)	Instrument
28	1/2	Totco
60	1/2	Totco
87	3/4	Totco
112	3/4	Totco
150	3/4	Totco
245	1 1/2	Totco
350	1	Totco
401	2	Totco

16. Abandonment Plugs:

- No Abandonment plugs were set.
- The well was completed with 178 mm casing to 397.5 meters and cemented to surface; the well was not drilled out.
- The well is currently suspended.

17. Composite Well Record: Attached

18. Completion Record: Not Applicable

19. Final Well Configuration: Attached

CANADIAN PETROLEUM ENGINEERING LTD.

STICK DIAGRAM - POST IN DOGHOUSE

Well Name: Aurora Training Well Inuvik G-53 License No. 9311-A 72 - 1 - 1

Operator: Aurora College

Wellsite Supervisor: Stan Podulsky

Surface Hole

Drill 311 mm hole to 155 m
Survey at 30 m then every 30 m max
Dummy trip at 160 m
Polymer
Strap at 160 m

Potential Problems: Permafrost may be
present, gravel may be encountered

Main Hole

Drill 216 mm hole to 400 m
Mud up at n/a m

Cut core at n/a m

Lost Circulation at Zone

Sample requirements: 5 m intervals
From 160 m to TD m

Potential Problems:
None Anticipated

High Pressure Formations

n/a Pressure:

n/a Pressure:

Low Pressure Formations

Pressure:

n/a Pressure:

Primary Target Formation Pressure

normal Pressure: 3934 kPa

Sour Zones

n/a H2S

 H2S

Logging Program: GR/Density/Temp/Cal

Drill Stem Tests: n/a

Wellhead/BOP's Surface Mud

279 x 244 mm 21 Mpa
Casing Bowl Spud Mud: Gel XC

228.6 mm 21 Mpa

BOP Stack For Gravel

AEUB Class n/a For MudRings

Surface Casing
Depth: 155 m kb

Description: 244 mm
71.62 kg/m, DST-80LT
 Main Hole Mud
Upper Section
Drill to m

Formation Tops
Pleistocene @ surface
 Properties
viscosity 47
water loss n/c
ph 12
solids 5%
mudweight 1120

Lower Cretaceous
@ 160 mKB

Paleozoic @
340 m KB

 Lower Section
Drill to TD m
Properties
viscosity 94
water loss n/c
ph 11
solids 7.5
mudweight 1170

 Bottom Hole Pressure
 4602 Kpa

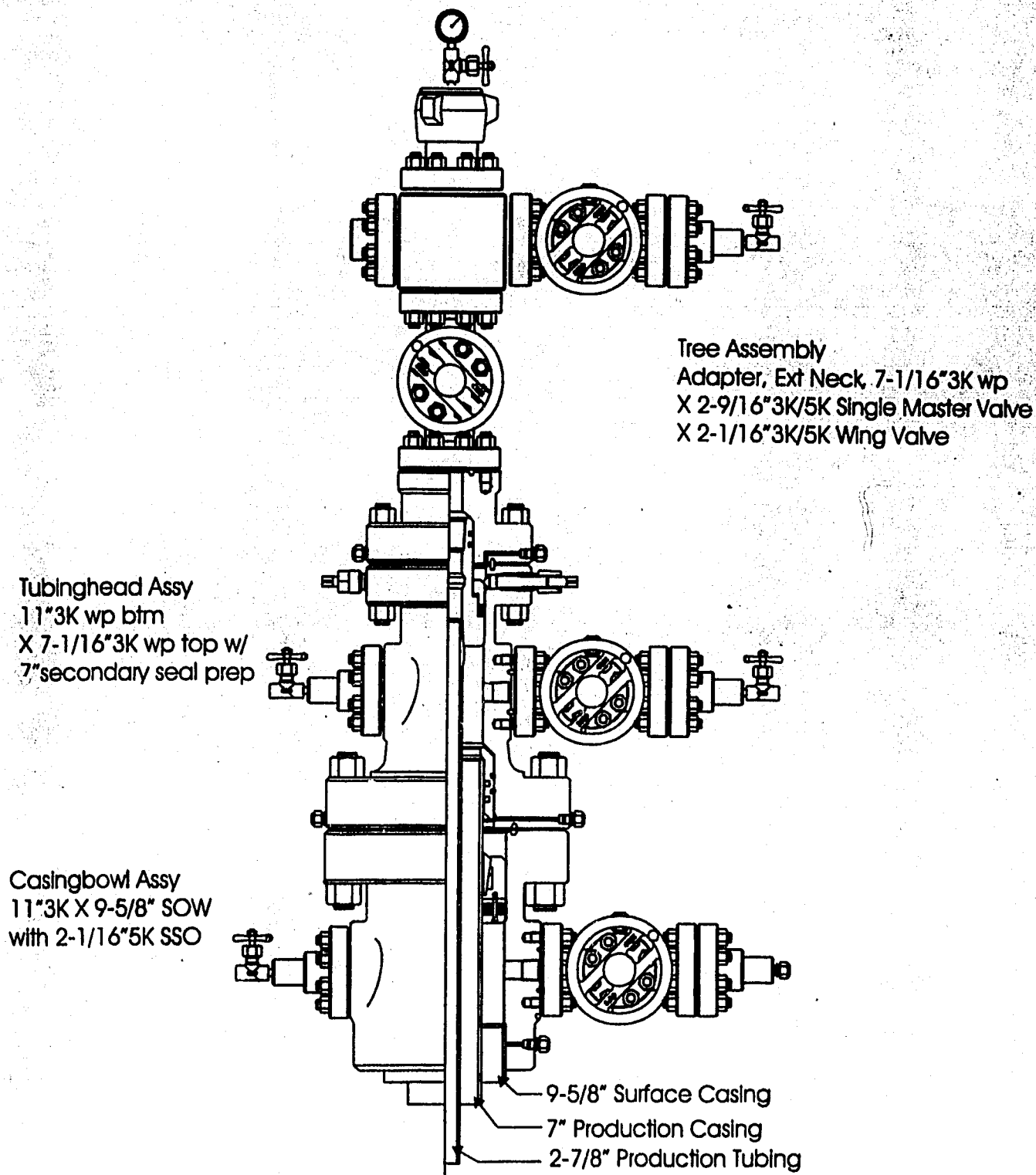
 Mud Weight
to control:

TD 401 m kg/m³

General Comments: 178 mm, 47.62 kg/m,

 DST-80 LT csg. set at TD

FMC Energy Systems



CONVENTIONAL WELLHEAD AND TREE SYSTEM
AURORA COLLEGE
INUVIK, NWT

D: Geology**Geological Summary:**

Formation Tops Formation	Lithology	Approximate Depth
Pleistocene	Shale/ minor Siltstone	Surface
Lower Cretaceous	Shale / minor Sandstone	180 m
Paleozoic	Shale/Sandstone w/ Carbonates	340 m
Total Depth		401m KB

Sample tops have not been corrected to wireline log control.

Sample Descriptions: (see also geological strip log - Appendix 12)

0 - 160 m: No samples taken.

160 - 165 m: Pleistocene (?). Loose pebbles (50%) in fine sand (.250-.350 mm). Pebbles are 5 mm in size and subrounded.

165 - 170 m: As above.

170 - 175 m: Loose pebbles (20%) in fine sand (.250-.350 mm). Pebbles are 1-2 mm in size and subrounded.

175 - 180 m: As above.

180 - 185 m: Lower Cretaceous. Silty mudstone (dark grey), subangular, 1-2 mm in size.

185 - 190 m: As above.

190 - 195 m: Silty mudstone (dark grey), angular, 5 - 10 mm in size.

195 - 200 m: Silty mudstone (dark grey), subangular, .350 - .500 mm in size.

200 - 205 m: Silty mudstone (dark grey), subangular, 4 - 8 mm in size.

205 - 210 m: As above

210 - 215 m: Silty mudstone (dark grey), subangular, 5 - 20 mm in size.

215 - 220 m: As above.

220 - 225 m: As above.

225 - 230 m: As above

230 - 235 m: Silty mudstone (dark grey), subrounded, 3 - 8 mm in size.

235 - 240 m: As above.

240 - 245 m: as above

245 - 250 m: As above.

- 250 - 255 m: As above.
- 255 - 260 m: As above
- 260 - 265 m: As above.
- 265 - 270 m: As above.
- 270 - 275 m: As above.
- 275 - 280 m: As above.
- 280 - 285 m: As above.
- 285 - 290 m: As above
- 290 - 295 m: As above
- 295 - 300 m: As above.
- 300 - 305 m: As above.
- 305 - 310 m: As above.

- 310 - 315 m: Silty mudstone (dark grey), subangular, 3 - 8 mm in size. Finer matrix of fine sand (.177 - .250 mm) with high quartz content.
- 315 - 320 m: As above.
- 320 - 325 m: As above.

- 325 - 330 m: Silty mudstone (dark grey), angular, 5 - 10 mm in size. Finer matrix of fine sand (.177 - .250 mm) with high quartz content.
- 330 - 335 m: As above.
- 335 - 340 m: As above.

- 340 - 345 m: Paleozoic. Mixture of silty mudstone (dark grey) and sandstone with high silicate content, subangular, not well sorted. Fine particles are (.177 - .250 mm) in size with high quartz content.
- 345 - 350 m: As above.

- 350 - 355 m: Mostly sand (.177 - .250 mm) with some sandstone (15%) and silty mudstone. Presence of Anthracite.

- 355 - 360 m: Silty mudstone (dark grey), subangular, 3 - 8 mm in size. Some sand in fine matrix (.177 - .250 mm).

- 360 - 365 m: Clayey mudstone (green), angular, (0.1 - 10 mm), 85%. Presence of sandstone, subangular (3 - 10 mm), 10%. Some silty mudstone, 5%.
- 365 - 370 m: As above.

- 370 - 375 m: Clayey mudstone (green), angular, 3 - 15 mm, 95%. Small percentage of sandstone, subangular (< 3 mm).

- 375 - 380 m: Clayey mudstone (green), angular, (0.1 - 10 mm), 85%. Presence of sandstone, subangular (3 - 10 mm), 10%. Some silty mudstone, 5%.

- 380 - 385 m: Clayey mudstone (green), angular, 3 - 15 mm, 100%.

385 - 390 m: Clayey mudstone (different mineral composition), angular, 3 - 155 mm in size, 100%.

390 - 395 m: Clayey mudstone (green), angular, 2 - 15 mm in size, 100%.

395 - 400 m: As above. Last sample.

401 m: TD.

Coring Record

No cores were cut on this well.

Gas Detection Report

The Akita Rig 15 Pason gas detection system was used on this well to monitor background and drilled gas concentrations.

Background gas varied from 0 to 1.0% over the drilling of the well.

No significant gas shows were encountered during the drilling of the well to TD of 401 meters KB. Neither trip gas nor connection gas was recorded while drilling.

Drill Stem Tests

There were no tests on this well.

Well Evaluation

The following logs were run:

Array Induction - SP	399.5 meters to 153.5 meters
Compensated Neutron Litho Density	399.5 meters to 153.5 meters
Cement Volume Log (Caliper)	399.5 meters to 153.5 meters
Temperature Log	399.5 meters to 153.5 meters

F. Appendices to Well History

Exploratory ☐
Development ☐Delineation ☐
Service ☒

APPROVAL TO DRILL A WELL

This application is submitted under Section 82 of the *Canada Oil and Gas Drilling Regulations*. When approved under Section 83 of the *Regulations*, it is the requisite approval for the commencement of drilling operations.

Well Name: Aurora Training Well Inuvik G-53
Operator: Aurora College Inuvik Drilling Program No.: n/a
Contractor: Akita Equiak Interest Identifier: n/a
Drilling Rig or Unit: #15 Estimated Well Cost: \$850,000
Location-Unit: G Section: 53 Grid Area: 6830-13330
Coordinates: Lat.: 68°22'28.04" Long.: 133°43'08.47"
Area: Inuvik Field / Pool: n/a
Elevation-KB/RT: 22.605m (ASL) GL / Seafloor: 17.905m
Approx. Spud Date: July 28, 2001 Est. Days on Location: 40
Anticipated Total Depth: 450m Target Horizons: n/a

EVALUATION PROGRAM

Ten-metre sample intervals n/a
Five-metre sample intervals from surface casing to TD
Canned sample intervals from surface casing to TD
Conventional cores at none
Logs and Tests Gamma Ray, Neutron Density to TD; Temperature and Caliper to TD

CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)	Cementing
<u>610</u>	<u>refrigerated conductor casing</u>		<u>20</u>	<u>8.5</u>
<u>244.5</u>	<u>79.62</u>	<u>DST 80LT</u>	<u>150</u>	<u>16.5</u>
<u>178</u>	<u>47.62</u>	<u>DST 80LT</u>	<u>450</u>	<u>6.7</u>

B.O.P. Equipment: diverter on 18" casing
Akita BOP on 9.5/8" surface casing. BOP consists of Hydril GK 11" 3m Annular
2 X Shafter 9" LWP 3m Single Gate Blind/Pipe Rams, 21 Mpa choke manifold
Other Information: The well is being drilled to be used as a training facility for students from the
Northwest Territories, the Yukon Territory and Nunavut

Signed: [Signature] Title: Vice President
Responsible Officer
Name: Lorne Hammer Company: Canadian Petroleum Engineering Inc.
Date: July 25, 2001 Phone: (403) 263-0752

APPROVAL

An approved copy of this notice is to be posted at each wellsite.

Date: July 27/01
File: 9311-A72-1-1
WID: 1915
UWI: 300G536830133300

Signed: [Signature]
Chief Conservation Officer

AURORA COLLEGE TEST WELL

DAILY DRILLING REPORT

WELL: AURORA COLLEGE TEST WELL				REPORT #: 1		DATE: 01-07-28	
DEPTH: mKB		PROGRESS: m		In rotating hours (last 24 hours)			
OPER 24.00: Rigging up and Waiting for remainder of rig to arrive				FOREMAN: STAN PODULSKY		MOBILE NO.: 780-975-8	
DAILY COST:		HOLE CND.: Good		WEATHER: O/Cast		TOOLPUSH:	
CUM COST:		RIG / RIG #: AKITA DRILLING		TEMP.:		T.P. MOBILE:	
FORMATION:		K.B. ELEV.: 22.91		ROADS: Rough		CHANNEL:	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS		
Bit No.						Time		Pump No.	# 1	#2
Size (mm)						Depth(m)		Make	EMSCO	EMSCO
Mfg.						Density		Model	D-650	D-650
Type						Mud Grad		Liner X Stk		
Serial #						Vis		SPM	#VALUE!	
Nozzles						PV		Pump Rate		
From (mKB)						YP		Pump Eff.		
To (mKB)						Gels		Pump Press.		kPa
Hrs on Bit						pH		Drillpipe AV		m/min
WOB (daN)						WL (cc's)		Drillcollar AV		m/min
RPM						Filter Cake		Nozzle Vel		m/sec
Condition						Sand (%)		MUD & CHEMICALS		
Pulled For?						Solids (%)		Mud Cycle	#VALUE!	min
Meters						Oil (%)		Bottoms Up	#VALUE!	min
m/hr						Pf/Mf		Tanks		m3
Cum Hrs						MBT		Hole Volume		m3
BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)						CI (ppm)		System Vol.		m3
						Ca (ppm)		Mud & Chemicals Added:		
BHA Length:						String Wt	daN			
Avail WOB:						Jts DP Recks	DC Conn:			
Jts DP in hole:						DP on Loc:	DP Conn:			
DRILLING OPERATIONS TIME BREAKDOWN						VOLUMES				
RU / TO		Survey		Plug Back		Cum Wtr Hld		Mud Daily Cost	\$500	
Drill Actual		Logging		Fishing		Loss Circ.	Nil	Mud Cum Cost	\$250	
Reaming		Run Casing		Direct. Drill		WELL CONTROL		SOLIDS CONTROL		
Coring		Cementing		Work Pipe		RSPP-SPM		Shaker Make		
Rm Rathole		WOC		Mouse / Rat		MACP(kPa)		Shaker Mesh		
Cond / Circ		NU BOP's		Safety Mtg		Calc Hole Fill			Desilter	Centrifuge
Tripping		Test BOP's		Move Rig		Act Hole Fill		Vol UF (l/min)		
Lubricate Rig		Drill Out Cmt		WO Trucks		Est BOP Drill:		U.F. (kg/m3)		
Repair Rig		DST				Daylights		O.F. (kg/m3)		
Slip/Cut Line		Handle Tools		Total Hrs		Afternoons		Hours/Days		
						Graveyards		Boiler Hrs:		(to 24:00)

24 HOUR SUMMARY	
Worked on location ,drilled conductor hole, set and cemented conductor pipe.	
Woc till morning.	
Midnite operations:	
Well spudded @	Original G.L.: 17.91 m
Directions to location 3 Km. North of Inuvic	Cut At Pin: m
	New G.L.: 17.905 m
	KB-Grd.: 5.00 m
	K.B.: 22.91 m

AURORA COLLEGE TEST WELL

DAILY DRILLING REPORT

WELL: AURORA COLLEGE TEST WELL				REPORT #: 2		DATE: 01-07-29	
DEPTH: 18 mKB		PROGRESS: 18 m		In rotating hours (last 24 hours)			
OPER 24:00: 1d waiting on welder to weld on casing flange.				FOREMAN: STAN PODULSKY		MOBILE NO.: 780-875-8055	
DAILY COST:		HOLE CND.:		WEATHER: Good		TOOLPUSH:	
CUM COST:		RIG / RIG #: AK/TA DRILLING		TEMP.:		T.P. MOBILE:	
FORMATION:		K.B. ELEV.: 22.905		ROADS: Rough		CHANNEL:	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS		
Bit No.						Time		Pump No.	# 1	#2
Size (mm)						Depth(m)		Make	EMSCO	EMSCO
Mfg.						Density		Model	D-650	D-650
Type						Mud Grad		Liner X Stk		
Serial #						Vis		SPM		
Nozzles						PV		Pump Rate	#VALUE!	
From (mKB)						YP		Pump Eff.	100%	100%
To (mKB)						Gels		Pump Press.		kPa
Hrs on Bit						pH		Drillpipe AV		m/min
WOB (daN)						WL (cc's)		Drillcollar AV		m/min
RPM						Filter Cake		Nozzle Vel		m/sec
Condition						Sand (%)		MUD & CHEMICALS		
Pulled For?						Solids (%)		Mud Cycle	#VALUE!	min
Meters						Oil (%)		Bottoms Up	#VALUE!	min
m/hr						Pt/Mf		Tanks		m3
Cum Hrs						MBT		Hole Volume	1	m3
BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)						CI (ppm)		System Vol.	1	m3
						Ca (ppm)		Mud & Chemicals Added:		
						Mud Co.	Newpark			
						Mud Man	Shydrowsky			
						Mud Up @	Surface			
						VOLUMES				
						Cum Wtr/Hld		Mud Daily Cost		
						Loss Circ.		Mud Cum Cost		
DRILLING OPERATIONS TIME BREAKDOWN						WELL CONTROL				
RU / TO	12	Survey		Plug Back		RSPP-SPM		SOLIDS CONTROL		
Drill Actual		Logging		Fishing		MACP(kPa)		Shaker Make		
Reaming		Run Casing		Direct. Drill		Calc Hole Fill		Shaker Mesh		
Coring		Cementing		Work Pipe		Act Hole Fill				
Rm Rathole		WOC		Wait O/water		Lst BOP Drill:		Vol UF (l/min)	Desitter	Centrifuge
Cond / Circ		NU BOP's		Conductor	4	Daylights		U.F. (kg/m3)		
Tripping		Test BOP's				Afternoons		O.F. (kg/m3)		
Lubricate Rig		Drill Out Cmt				Graveyards		Hours/Days		
Repair Rig		DST						Boiler Hrs: (to 24:00)		
Slip/Cut Line		Hnd/ie Tools		Total Hrs	16					

24 HOUR SUMMARY	
8:00	Installed cellar, Drilled mouse and rat hole, to 12:00 hrs. Spotted rig and equipment , rigged up to 24:00 hrs.

DAILY DRILLING REPORT

WELL: AURORA COLLEGE TEST WELL				REPORT #: 3		DATE: 01-07-30	
DEPTH: 32 mKB		PROGRESS: 14 m		In 2		rotating hours (last 24 hours)	
OPER 06:00 Drilling				FOREMAN: STAN PODULSKY		MOBILE NO.: 780-475-8055	
DAILY COST:		HOLE CND.:		WEATHER: O-Cast		TOOLPUSH: M Lyle	
CUM COST:		RIG / RIG #: AKITA DRILLING		TEMP.: 4		T.P. MOBILE:	
FORMATION: Surface		K.B. ELEV.: 22.905		ROADS: Good		CHANNEL:	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS		
Bit No.	1					Time	23:00	Pump No.	# 1	#2
Size (mm)	311					Depth(m)	30	Make	EMSCO	EMSCO
Mfg.	Reed					Density	1040	Model	P-650	P-650
Type	HP11					Mud Grad	10.20	Linear X Stk	152 X 254	152 X 254
Serial #	QR6315					Vis	40	SPM	140	
Nozzles	3 x 19					PV		Pump Rate		
From (mKB)						YP		Pump Eff.	95%	
To (mKB)	32					Gels		Pump Press.		kPa
Hrs on Bit	2					pH	9.5	Drillpipe AV		m/min
WOB (daN)	4					WL (cc's)		Drillcollar AV		m/min
RPM	80					Filter Cake		Nozzle Vel		m/sec
Condition	Run					Sand (%)		MUD & CHEMICALS		
Pulled For?	In					Solids (%)		Mud Cycle	16	min
Meters	32					Oil (%)		Bottoms Up	1	min
m/hr	16.0					P1/Mf		Tanks	30	m3
Cum Hrs	2					MBT		Hole Volume	1	m3
BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)						CI (ppm)		System Vol.	31	m3
						Ca (ppm)		Mud & Chemicals Added:		
BHA Length: 19.27 String Wt 7,000 daN						Mud Co.	Newpark	Bentonite	11	
						Mud Man	Shydowsky	Ofoam	1	
Avail WOB: Jts DP Racks DC Conn:						Mud Up @		Soda ash	1	
						JtsDP in hole: DP on Loc: DP Conn:		KCL	150	
DRILLING OPERATIONS TIME BREAKDOWN						VOLUMES		Caustic	1	
						CumWtrHld		Mud Daily Cost		
RU / TO	22	Survey		Plug Back		Loss Circ.		Mud Cum Cost		
Drill Actual	2	Logging		Fishing		WELL CONTROL		SOLIDS CONTROL		
Reaming		Run Casing		Direct. Drill		RSPP-SPM		Shaker Make		
Coring		Cementing		Work Pipe		MACP(kPa)		Shaker Mesh		
Rm Rathole		WOC		Mix L.C.M.		Calc Hole Fill			Desilter	Centrifuge
Cond / Circ		NU BOP's				Act Hole Fill		Vol UF (l/min)		
Tripping		Test BOP's				Lat BOP Drill:		U.F. (kg/m3)		
Lubricate Rig		Drill Out Cmt				Daylights		O.F. (kg/m3)		
Repair Rig		DST				Afternoons		Hours/Days		
Slip/Cut Line		Handle Tools		Total Hrs	24	Gravoyards		Boiler Hrs:		(to 24:00)

24 HOUR SUMMARY	
Rigged to spud to 21:00 drilled out cement to 22:00 hrs. drilled ahead to 32 M. to 24:00 hrs.	

DAILY DRILLING REPORT

WELL: AURORA COLLEGE TEST WELL				REPORT #: 4		DATE: 01-07-31	
DEPTH: 155 mKB		PROGRESS: 123 m		In 18 1/4 rotating hours (last 24 hours)			
OPER 24:00: Pull out to run casing				FOREMAN: STAN PODULSKY		MOBILE NO.: 780-975-8055	
DAILY COST:		HOLE CND.: V/good		WEATHER: C lear		TOOLPUSH:	
CUM COST:		RIG / RIG #: AKITA DRILLING		TEMP.:		T.P. MOBILE:	
FORMATION:		K.B. ELEV.: 22.905		ROADS: Good		CHANNEL:	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS		
Bit No.	1-A			1/2	28M.	Time	21:30	Pump No.	# 1	#2
Size (mm)	311			1/2	60 M.	Depth(m)	144	Make	EMSCO	EMSCO
Mfg.	Reed			3/4	87 M.	Density	1170	Model	P-650	P-650
Type	HP-11			3/4	112 M.	Mud Grad	11.48	Liner X Stk	152 X 254	152 X 254
Serial #	QR6315			3/4	150 M.	Vis	52	SPM	80	80
Nozzles	3 x 19					PV		Pump Rate	1.12	1.12
From (mKB)						YP		Pump Eff.	95%	100%
To (mKB)	155					Gels		Pump Press.	2,340	kPa
Hrs on Bit	18 1/4					pH	9.0	Drillpipe AV	34	m/min
WOB (daN)	7,000					WL (cc's)		Drillcollar AV	40	m/min
RPM	80/100					Filter Cake		Nozzle Vel		m/sec
Condition	1-1-in					Sand (%)		MUD & CHEMICALS		
Pulled For?	casing					Solids (%)		Mud Cycle	2	min
Meters	155					Oil (%)		Bottoms Up	2	min
m/hr	8.5					P/I/M		Tanks		m3
Cum Hrs	18 1/4					MBT		Hole Volume	5	m3
BOT: OMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)						CI (ppm)		System Vol.	5	m3
						Ca (ppm)		Mud & Chemicals Added:		
						Mud Co.		KCL	50	
						Mud Man		GEL	24	
BHA Length: 57.41 String Wt 12 daN						Mud Up @		NEWZAN		7
Avail WOB: 10 Jts DP Racks -6 DC Conn:						VOLUMES				
Jts DP in hole: 6 DP on Loc: DP Conn:						Cum Wtr Hld		Mud Daily Cost		
DRILLING OPERATIONS TIME BREAKDOWN						Loss Circ.		Mud Cum Cost		
RU / TO		Survey	1 1/4	Plug Back		WELL CONTROL		SOLIDS CONTROL		
Drill Actual	16 1/4	Logging		Fishing		RSPP-SPM		Shaker Make		
Reaming		Run Casing		Direct Drill		MACP(kPa)	1149	Shaker Mesh		
Coring		Cementing		Work Pipe	1 3/4	Calc Hole Fill		Vol UF (l/min)	Desilter	Centrifuge
Rm Rathole		WOC				Act Hole Fill		U.F. (kg/m3)		
Cond / Circ	3/4	NU BOP's				Lat BOP Drill:		O.F. (kg/m3)		
Tripping	3 1/4	Test BOP's				Daylights		Hours/Days		
Lubricate Rig	3/4	Drill Out Cmt				Afternoons		Boiler Hrs:	(to 24:00)	
Repair Rig		DST				Graveyards				
Slip/Cut Line		Handle Tools		Total Hrs	24					

24 HOUR SUMMARY	
0:00	Serviced rig and drilled to 41 m. to 01:15 hrs. Worked tight hole to 03:00 hrs. Drilled and surveyed to 78 m.
	to 08:45 hrs. serviced rig to 09:00 hrs. Drilled and surveyed to 144 M. to 17:30 hrs. Circulated to 17:45 hrs.
	Made wiper trip to 19:15 hrs. Serviced rig to 19:30 hrs. Tripped back in to 20:30 hrs.
	Drilled to 155 M. to 22:30 hrs. Circulated and ran survey to 23:15 hrs. Hoist to run casing to 24:00 hrs.

AURORA COLLEGE TEST WELL

DAILY DRILLING REPORT

WELL: AURORA COLLEGE TEST WELL				REPORT #: 5		DATE: 01-08-01	
DEPTH: 155 mKB		PROGRESS: m		In rotating hours (last 24 hours)			
OPER 24:00:				FOREMAN: STAN PODULSKY		MOBILE NO.: 780-875-8885	
DAILY COST:		HOLE CND.:		WEATHER: O-cast		TOOLPUSH:	
CUM COST:		RIG / RIG #: AKITA DRILLING		TEMP.: 5		T.P. MOBILE:	
FORMATION:		K.B. ELEV.: 22.905		ROADS: Good		CHANNEL:	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS		
Bit No.	1					Time	05:00 hrs.	Pump No.	# 1	#2
Size (mm)	215					Depth(m)	155	Make	EMSCO	EMSCO
Mfg.	Reed					Density	1160	Model	P-650	P-650
Type	EH11					Mud Grad	11.38	Linear X Stk	152 X 254	152 X 254
Serial #	Cm3310					Vis	50	SPM		
Nozzles	3x9.5					PV		Pump Rate		
From (mKB)	155					YP		Pump Eff.	95%	
To (mKB)	155					Gels		Pump Press.		kPa
Hrs on Bit						pH	9.0	Drillpipe AV		m/min
WOB (daN)						WL (cc's)		Drillcollar AV		m/min
RPM						Filter Cake		Nozzle Vel		m/sec
Condition						Sand (%)		MUD & CHEMICALS		
Pulled For?						Solids (%)		Mud Cycle		min
Meters						Oil (%)		Bottoms Up		min
m/hr						P/Mf		Tanks		m3
Cum Hrs						MBT		Hole Volume	5	m3
BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)						Cl (ppm)		System Vol.	5	m3
						Ca (ppm)		Mud & Chemicals Added:		
						Mud Co.	Newpark			
						Mud Man	Craig			
BHA Length:						Mud Up @				
String Wt		daN				VOLUMES				
Avail WOB:	Jts DP Racks	DC Conn:				Cum Wtr/Hld		Mud Daily Cost		
Jts DP in hole:	DP on Loc:	DP Conn:				Loss Circ.		Mud Cum Cost		

DRILLING OPERATIONS TIME BREAKDOWN						WELL CONTROL		SOLIDS CONTROL	
RU / TO	1 1/4	Survey		Plug Back		RSPP-SPM		Shaker Make	
Drill Actual		Logging		Fishing		MACP(kPa)	1166	Shaker Mesh	
Reaming		Run Casing	2	Direct. Drill		Calc Hole Fill		Vol UF (l/min)	
Coring		Cementing	1 1/4	Work Pipe		Act Hole Fill		U.F. (kg/m3)	
Rm Rathole		WOC	6 1/2	Weld on bowl	5 1/2	Lat BOP Drill:		O.F. (kg/m3)	
Cond / Circ	1	NU BOP's	4 1/2	Safety meeting	3/4	Daylights		Hours/Days	
Tripping	1/4	Test BOPs	3/4			Afternoons		Boiler Hrs:	(to 24:00)
Lubricate Rig	1/4	Drill Out Cmt				Graveyards			
Repair Rig		DST							
Slip/Cut Line		Handle Tools		Total Hrs	24				

24 HOUR SUMMARY

Tripped out to run casing to 00:15 Rig to and ran 11 jts. 244.9 mm. Casing to 06:30 hrs. Waited on cement to 13:00 hrs. Cut off casing and welded on bowl to 19:00 hrs. Nipped up BOPS. To 23:15 hrs. Pressure tested Blind rams ,manifold pipe rams and Hydril to 1400 Kpa. And 10000Kpa. Ok(10 mins.) each. Checked motor offs OK.to 24:00 hrs.

AURORA COLLEGE TEST WELL

DAILY DRILLING REPORT

WELL: AURORA COLLEGE TEST WELL				REPORT #: 6		DATE: 01-08-02	
DEPTH: 349 mKB		PROGRESS: 194 m		In 16 rotating hours (last 24 hours)			
OPER 24:00: Circulate				FOREMAN: STAN PODULSKY		MOBILE NO.: 780-975-8055	
DAILY COST:		HOLE CND.:		WEATHER: Ocast		TOOLPUSH:	
CUM COST:		RIG / RIG #: AKITA DRILLING		TEMP.: 10		T.P. MOBILE:	
FORMATION:		K.B. ELEV.: 22.905		ROADS: Good		CHANNEL:	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS	
Bit No.	1			1 1/2	245	Time	20:20	Pump No.	# 1
Size (mm)	216					Depth(m)	349	Makes	EMSCO
Mfg.	Reed					Density	1170	Model	P-650
Type	EH11					Mud Grad	11.48	Line X Stk	152 X 254
Serial #	CM3310					Vis	94	SPM	
Nozzles	3 X 9.5					PV	20	Pump Rate	
From (mKB)	155					YP	25.5	Pump Eff.	95%
To (mKB)	349					Gels	10.5/18	Pump Press.	kPa
Hrs on Bit	16					pH	11.0	Drillpipe AV	m/min
WOB (daN)	7,000					WL (cc's)	N/C	Drillcollar AV	m/min
RPM	120					Filter Cake		Nozzle Vel	m/sec
Condition	Run					Sand (%)		MUD & CHEMICALS	
Pulled For?						Solids (%)		Mud Cycle	min
Meters	194					Oil (%)		Bottoms Up	min
m/hr	12.1					P/Mf		Tanks	m3
Cum Hrs	16					MBT		Hole Volume	11 m3
BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)						CI (ppm)	43000	System Vol.	11 m3
						Ca (ppm)	200	Mud & Chemicals Added:	
BHA Length: 84.87						Mud Co.	Newpark	Gel	2
String Wt 12,000 daN						Mud Man	Shydowsky	KCL	82
Avail WOB: 8,000						Mud Up @	Surface	Newzan	2
Jts DP Racks						DP Conn:		Nofoam	1
Jts DP in hole:						DP Conn:		Soda ash	1
DP on Loc:						VOLUMES			
DRILLING OPERATIONS TIME BREAKDOWN						Cum Wtr Hld		Mud Daily Cost	
RU / TO		Survey	1/4	Plug Back		Loes Circ.		Mud Cum Cost	
Drill Actual	16	Logging		Fishing		WELL CONTROL			
Reaming		Run Casing		Direct Drill		RSPP-SPM	920/60	SOLIDS CONTROL	
Coring		Cementing		Work Pipe		MACP(kPa)	1149	Shaker Make	
Rm Rathole		WOC		Bop Drill	1/2	Calc Hole Fill		Shaker Mesh	
Cond / Circ	1/4	NU BOP's				Act Hole Fill		Vol UF (l/min)	
Tripping	2	Test BOP's	2 3/4			Let BOP Drill		U.F. (kg/m3)	
Lubricate Rig	1/2	Drill Out Cmt	1 3/4			Daylights	01/08/02	O.F. (kg/m3)	
Repair Rig		DST				Afternoons	01/08/02	Hours/Days	
Slip/Cut Line		Handle Tools		Total Hrs	24	Graveyards		Boiler Hrs:	(to 24:00)

24 HOUR SUMMARY

Tested BOPs. To 01:00 hrs. Ran in with bit and pressure tested pop valve - OK. To 02:15 hrs. Finnish pressure testing BOPs. Tested Hydri, pipe rams, hcr, and manual valves, check valve, stabbing valve, inside bop., upper and lower kelly cocks, to 1400 and 10000 Kpa. 10 mins each OK. Function tested

motor kills OK. Function tested accumulator: precharge 6200 Kpa. Pumped up accumulator

from 13000Kpa. To 20000 Kpa. OK. Precharge 6200 Kpa. Held BOP. Drill to 04:15 hrs. Drilled out cement to 06:00 hrs. drilled to 173 M. to 08:00 hrs. Tripped for mud ring to 08:45 hrs. BOP drill to 09:00 hrs. Drilled and surveyed as required to 349 M. to 24:00 hrs.

AURORA COLLEGE TEST WELL

DAILY DRILLING REPORT

WELL: AURORA COLLEGE TEST WELL				REPORT #: 7		DATE: 01-08-03	
DEPTH: 401 mKB		PROGRESS: 52 m		in 10 1/4 rotating hours (last 24 hours)			
OPER 24:00: Rig to run casing				FOREMAN: STAN PODULSKY		MOBILE NO.: 780-875-8085	
DAILY COST:		HOLE CND.:		WEATHER: Rain		TOOLPUSH:	
CUM COST:		RIG / RIG #: AKITA DRILLING		TEMP.: 5		T.P. MOBILE:	
FORMATION:		K.B. ELEV.: 22.905		ROADS: Good		CHANNEL:	

BIT PERFORMANCE				SURVEYS		DRILLING FLUID		PUMPS			
Bit No.	2			2	401	Time	14:15	Pump No.	# 1	#2	
Size (mm)	216					Depth(m)	401	Make	EMSCO	EMSCO	
Mfg.	Reed					Density	1275	Model	P-650	P-650	
Type	HP13G					Mud Grad	12.51	Liner X Stk	152 X 254	152 X 254	
Serial #	MB5510					Vls	150	SPM			
Nozzles	3 X 11					PV	10	Pump Rate			
From (mKB)	349					YP	42.5	Pump Eff.	95%		
To (mKB)	401					Gels	1	Pump Press.		kPa	
Hrs on Bit	10 1/4					pH	10.0	Drillpipe AV		m/min	
WOB (daN)	7000					WL (cc's)	n/c	Drillcollar AV		m/min	
RPM	120					Filter Cake		Nozzle Vel		m/sec	
Condition	Bald					Sand (%)	1.0%	MUD & CHEMICALS			
Pulled For?	Casing					Solids (%)	14.0%	Mud Cycle		min	
Meters	52					Oil (%)		Bottoms Up		min	
m/hr	5.1					PI/MI	.17/38	Tanks		m3	
Cum Hrs	10 1/4					MBT	85	Hole Volume	13	m3	
BOTTOMHOLE ASSEMBLY (No., Item, OD, ID, TJ Type)						CI (ppm)	38000	System Vol.	13	m3	
						Ca (ppm)	220	Mud & Chemicals Added:			
						Mud Co.	Newpark	Desco			4 sac
						Mud Man	Shydowsky				
BHA Length:						String Wt		daN			
Aveil WOB:						Jts DP Racks		DC Conn:			
JtsDP in hole:						DP on Loc:		DP Conn:			
DRILLING OPERATIONS TIME BREAKDOWN						CumWtrHld		Mud Daily Cost			
RU / TO		Survey	1/2	Plug Back		Loss Circ.		Mud Cum Cost			
Drill Actual	10 1/4	Logging	2 3/4	Fishing		WELL CONTROL		SOLIDS CONTROL			
Reaming		Run Casing	3/4	Direct. Drill		RSPP-SPM		Shaker Make			
Coring		Cementing		Work Pipe		MACP(kPa)	970	Shaker Mesh			
Rm Rathole		WOC		Safety meeting	1/4	Calc Hole Fill		Desilter			
Cond / Circ	3/4	NU BOP's				Act Hole Fill		Centrifuge			
Tripping	8	Test BOP's				Let BOP Drill:		Vol UF (l/min)			
Lubricate Rig	3/4	Drill Out Cmt				Daylights		U.F. (kg/m3)			
Repair Rig		DST				Afternoons		O.F. (kg/m3)			
Stop/Cut Line		Handle Tools		Total Hrs	24	Graveyards		Hours/Days			
24 HOUR SUMMARY						Boiler Hrs:		(to 24:00)			

Pulled out of the hole to change bits and make wiper trip to 01:45 hrs. Ran back in to 03:15 hrs. Drilled and surveyed as required to 401 Mkb.Circulated and pulled out to log to 15:45.Serviced rig and logged with Schlumberger to 19:00 hrs.Made up bit and ran in to lay down pipe to 20:15. Circulated , ran survey, and layed down pipe and drill collars to 23:15 hrs. Rigged to run casing to 24:00 hrs.

CANADIAN PETROLEUM ENGINEERING INC. **DAILY DRILLING REPORT**

(report period from 0:00 to 24:00 hours)

Canadian Petroleum Engineering Inc.

WELL NAME: Aurora College Training Well Inuvik G-53

DEPTH (2400 h): 401 m PROGRESS: 0 m OPERATION: Well Suspended

DATE: 01/08/04

DAY: 8

AFE NO.:

DRILLING FLUID									
TIME:	1415	hrs	TYPE:	KCl Polymer	LOST TO FORMATION:	0	m ³	@	m
DENSITY	1275	kg/m ³	FILTRATE:	nc	cm ³ /30 min	SOLIDS:	14	%	
FUNNEL VISC.:	150	s/L	FILTER CAKE:	0	mm	SAND:	1	%	
PLASTIC VISC.:	10	mPa.s	CHLORIDE:	38000	mg/L	TEMP.	26	°C	
YIELD POINT:	42.5	Pa	CALCIUM:	220	mg/L	SCREEN MESH:	80		
GEL STRENGTH:	22/27	Pa	POTASSIUM:		mg/L	DUMPED:		m ³	
PH:	10.0		BOTTOMS UP:		min				

CENTRIFUGE / DESANDER: OF: _____ UF: _____ DESILTER: OF: _____ UF: _____
 LAST BLOWOUT DRILL: 01/08/02 LAST SAFETY TALK: 01/08/04

BIT RECORD														
BIT NO.	SIZE (mm)	TYPE	CLASS	SERIAL NO.	JETS (mm)			DEPTH OUT	METRES DRILLED	HOURS	m/h	DULL CONDITIONS		
					1	2	3					T	B	G
2	216	HP13G	137		11	11	11	401	52	10.25	5.1	8	8	

BIT NO.	FORCE ON BIT (1000 daN)	ROTARY SPEED (r/min)	LINER SIZE (mm)	STROKE LENGTH (mm)	PUMP SPEED (r/min)	OUTPUT (m ³ /min)					JET VELOCITY (m/s)	PUMP PRESSURE (kPa)
2	7000	120	152	254	113	1.3					71.9	4650

DEVIATION SURVEYS	
2	@ 401 m
	@ m
	@ m
	@ m
	@ m
	@ m

MUD ADDITIVES USED (Sacks)	

DRILLING ASSEMBLY (Bit to Kelly)			
TOOL	O.D. (mm)	I.D. (mm)	LENGTH (m)

TIME DISTRIBUTION (hr)			
DRILLING:		RUN CASING AND CEMENT:	9.5
TRIPPING:		FISHING:	
RIG SERVICE CHECK BOPS:		LOGGING:	
SURVEYING:		CORING:	
REAM AND CLEAN:		DRILL STEM TESTING:	
MIX AND CONDITION MUD:		WOC:	
CIRCULATING		HEAD UP:	2
		SUP LINE:	
		RIG REPAIR:	
		RIG UP / TEAR DOWN:	
		HANDLE TOOLS:	
		Safety Meeting	0.5
		TOTAL:	12

REMARKS: Run 30 jts 178 mm, 47.62 kg/m, DST -80 LT casing to 398 meters. Make up 178 mm BTC swedge and cement with 9 tonnes permafrost cement. Set FMC slips and cut casing. Rig released at 1200 Hrs.
 Well training course to commence 01/08/05

DAILY COSTS: _____ OPERATION AT: Rig Released 0700 h:
 CUM COSTS: _____ SPUDDED: 01/07/30 KB ELEV: 22.905 m GL ELEV: 17.605 m
 AFE'D COSTS: _____ RIG RELEASE: 1200/01/08/04 PROJ TD: 450 m DRILLED: 401 m

CONTRACTOR: Akita RIG NUMBER: 15
 WEATHER CONDITIONS: Sunny LEASE CONDITIONS: Dry
 WELLSITE SUPERVISOR: Stan Podulsky REPORT TAKEN BY: L Hammer

LICENCE NO. :		WELL NAME AND NO. :		(2) Detailed Inspection-Weekly (Using Check List) (3) HSS Signs Posted(If Required) (4) Well License & Stick Diagram Posted (5) Flare Lines Staked (6) BOP Drills Performed (7) Visually Inspect BOP's - Flarelines & Degasser Lines	
OPERATOR :		CONTRACTOR : AKITA DRILLING LTD.		(1) Rig Site Health and Safety Meeting (once/week/month) (2) C.A.,O.D.C. Rig Safety Inspection Checklist(once/month) (3) Mast Inspection Before Raising or Lowering (4) Crown Saver Checked (5) Motor Kils Checked	
SURFACE LOCATION :		UNIQUE I.D. :		(1) ML (2) ML (3) ML (4) ML (5) ML (6) ML (7) ML (8) ML (9) ML (10) ML (11) ML (12) ML (13) ML (14) ML (15) ML (16) ML (17) ML (18) ML (19) ML (20) ML (21) ML (22) ML (23) ML (24) ML (25) ML (26) ML (27) ML (28) ML (29) ML (30) ML (31) ML (32) ML (33) ML (34) ML (35) ML (36) ML (37) ML (38) ML (39) ML (40) ML (41) ML (42) ML (43) ML (44) ML (45) ML (46) ML (47) ML (48) ML (49) ML (50) ML (51) ML (52) ML (53) ML (54) ML (55) ML (56) ML (57) ML (58) ML (59) ML (60) ML (61) ML (62) ML (63) ML (64) ML (65) ML (66) ML (67) ML (68) ML (69) ML (70) ML (71) ML (72) ML (73) ML (74) ML (75) ML (76) ML (77) ML (78) ML (79) ML (80) ML (81) ML (82) ML (83) ML (84) ML (85) ML (86) ML (87) ML (88) ML (89) ML (90) ML (91) ML (92) ML (93) ML (94) ML (95) ML (96) ML (97) ML (98) ML (99) ML (100) ML	
OPERATOR'S REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE : (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		(1) TEMPERATURE (2) CONDITIONS (3) WIND DIRECTION (4) ROAD CONDITION	

- (1) Daily Walk Around Inspection
- (2) Detailed Inspection-Weekly (Using Check List)
- (3) HES Signs Posted(If Required)
- (4) Wet License & Stick Diagram Posted
- (5) Flare Lines Staked
- (6) BOP Drills Performed
- (7) Visually Inspect BOP's - Pluralines & Degasser Lines
- (1) Rig Site Health and Safety Meeting (once a month)
- (2) C.A.C.D.C. Rig Safety Inspection Checklist(once a month)
- (3) Mast Inspection Before Raising or Lowering
- (4) Crown Saver Checked
- (5) Motor Jibs Checked

Qty.	R.M.	YEAR 2001	MONTH 7	DAY 30
	ML	REQ NO.: 15		
	ML	FUEL @ 00:00 HRS.		
	ML	REQ	BOILER	
	ML	WEATHER	TEMPERATURE	
			CONDITIONS	
	ML		WIND DIRECTION	
	ML		ROAD CONDITION	

SAFETY TOPIC

[illegible][illegible]

LICENCE NO. :	WELL NAME AND NO. :	
OPERATOR :	CONTRACTOR : AKITA DRILLING LTD.	(2) Detailed Inspection-Weekly (Using Check List) (3) H2S Signs Posted(If Required) (4) Well License & Stick Diagram Posted (5) Flare Lines Staked (6) BOP Drills Performed (7) Visually Inspect BOP's - Flarelines & Degasser Lines
SURFACE LOCATION :	UNIQUE I.D. :	(1) Rig Site Health and Safety Meeting (once/a month) (2) C.A.O.D.C. Rig Safety Inspection Checklist(once/a month) (3) Mast inspection Before Raising or Lowering (4) Crown Saver Checked (5) Motor Kils Checked
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE : (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)

- (1) Daily Walk Around Inspection
- (2) Detailed Inspection-Weekly (Using Check List)
- (3) H2S Signs Posted, if Required
- (4) Well License & Stick Diagram Posted
- (5) Flare Lines Staked
- (6) BOP Drills Performed
- (7) Visually Inspect BOP's - Flarelines & Degasser Lines

- (1) Rig Site Health and Safety Meeting (once a month)
- (2) C.A.Q.D.C. Rig Safety Inspection Checklists (once a month)
- (3) Mast Inspection Before Raising or Lowering
- (4) Crown Saver Checked
- (5) Motor Kills Checked

DAY	TIME	YEAR	MONTH	DAY
MI	MI	REG NO.:	15	
MI	MI	FUEL @ 00:00 HRS.		
MI	MI	REG	SOLAR	
MI	MI	WIND	TEMPERATURE	
MI	MI		CONDITIONS	
MI	MI		WIND DIRECTION	
MI	MI		ROAD CONDITION	

SAFETY TOPIC

[illegible][illegible]

LICENCE NO. :		WELL NAME AND NO. :		(2) Detailed Inspection-Weekly (Using Check List) (3) H2S Signs Posted(If Required) (4) Well License & Stick Diagram Posted (5) Flare Lines Stated (6) BOP Drills Performed (7) Visually Inspect BOP's - Flarelines & Degasser Lines		RIG NO.: 15 FUEL ● ON-GAS HWS. RIG BOILER	
OPERATOR :		CONTRACTOR : AKITA DRILLING LTD.					
SURFACE LOCATION :		UNIQUE I.D. :				(1) Rig On Location and Safety Meeting (once/month) (2) C.A.O.D.C. Rig Safety Inspection Checklist(once/month) (3) Mast Inspection Before Raising or Lowering (4) Crown Sealer Checked (5) Motor Kils Checked	
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE : (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)				WEATHER TEMPERATURE CONDITIONS WIND DIRECTION ROAD CONDITION	
STAN PODULSKY		MURRAY LYLE		SAFETY TOPIC		PRE SPUD	

[illegible]

MORNING SHIFT

[illegible]

LICENCE NO. :		WELL NAME AND NO. : AURORA COLLEGE ET AL		(2) Detailed Inspection-Weekly (Using Check List) (3) H2S Signa Posted(If Required) (4) Well License & Stick Diagram Posted (5) Flare Lines Staked (6) BOP Drills Performed (7) Visually Inspect BOP's - Flarelines & Degasser Lines		RIG NO. : 15 FUEL @ 08:00 HRS. RIG 122 BOILER	
OPERATOR : AURORA COLLEGE		CONTRACTOR : AKITA DRILLING LTD.		(1) Rig Site Health and Safety Meeting (one/crew/month) (2) C.A., O.D.C. Rig Safety Inspection Checklist(once/rig/month) (3) Mast Inspection Before Raising or Lowering (4) Crown Saver Checked (5) Motor Kils Checked		TEMPERATURE CONDITIONS WIND DIRECTION ROAD CONDITION	
SURFACE LOCATION : 68:22:28.04 N 13		UNIQUE I.D. : 300G536830133300					
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE : (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)					

MURRAY LYLE

SAFETY TOPIC

RUN CSG & CEMENT

LAST CASING TURNING OR LINER	O.D. mm		MIN. I.D	kg/m	MAKE	GRADE	# OF JOINTS	TOTAL (m)	KB TO CSG.	SET AT (m)	SHALE SHAKER(S)				RENTALS / SERVICES										Mon	Day	Eve
											NO.	TYPE	TYPE														
											CHANGE SCREENS		YES	NO													
											TOP	TOP															
											MIDDLE	MIDDLE															
										BOTTOM	BOTTOM																
DC, DP SIZE		KG / M	GRADE	MIN. I.D	TOOL JT. O.D.	TYPE THREAD	# OF JOINTS	PUMP MANUFACTURER	PUMP TYPE	STROKE LTH.																	
CODE NO.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL
OPER.	GROUP A TEARDOWN	DRILL ACTUAL	REPAIRING	CORING	COND. DRUG & CIRC.	TRIPS	NO SERVICE	REPAIRING	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOGS	RUN CSG. & CEMENT	WAIT ON CEMENT	HOIST UP S.O.P.	TEST S.O.P.	DRILL STEM	PLUG BACK	SOURCE CEMENT	FINISHING	DIRECTIONAL WORK	SAFETY MEETING	RIG UP TO	WELD BOW				
MORN					1.00	0.25	0.25					3.25	1.50								0.50	1.25				8.00	
DAY													5.00	0.50									2.50			8.00	
EVE														4.00	0.75						0.25		3.00			8.00	
TOTAL					1.00	0.25	0.25					3.25	6.50	4.50	0.75						0.75	1.25	5.50			24.00	

[illegible]

LICENCE NO. :		WELL NAME AND NO. : AURORA COLLEGE ET AL		(2) Detailed Inspection-Weekly (Using Check List) (3) H2S Signs Posted(If Required) (4) Well License & Stick Diagram Posted (5) Flare Lines Staked (6) BOP Drills Performed (7) Visually inspect BOP's - Flarelines & Degasser Lines		R/O NO. : 15 FUEL @ 06:00 HRS. R/O 122 SOLER	
OPERATOR : AURORA COLLEGE		CONTRACTOR : AKITA DRILLING LTD.		(1) Rig Site Health and Safety Meeting (one/crash/month) (2) C.A..O.D.C. Rig Safety Inspection Checklist(one/night/month) (3) Mast Inspection Before Raising or Lowering (4) Crown Saver Checked (5) Motor Killa Checked		WEATHER TEMPERATURE CONDITIONS WIND DIRECTION ROAD CONDITION	
SURFACE LOCATION : 68:22:28.04 N 13		UNQUE I.D. : 300G536830133300					
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE : (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)					

NIPPLE UP BOPS

LAST CASING TUBING OR LINER	O.D. mm		MIN. I.D	kg/m	MAKE	GRADE	# OF JOINTS	TOTAL (m)	KB TO CSG	SET AT (m)	SHALE SHAKER(S)							RENTALS / SERVICES										Morn	Day	Eve
											NO.	TYPE		TYPE																
											CHANGE SCREENS			YES		NO														
											TOP		TOP																	
										MIDDLE		MIDDLE																		
										BOTTOM		BOTTOM																		
DC. DP SIZE	KG / L	GRADE	MIN. I.D	TOOL JT. O.D.	TYPE THREAD	# OF JOINTS	PUMP MANUFACTURER		PUMP TYPE	STROKE LTH.																				
CODE NO.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL			
OPER.	REPAIR & TRANSFORM	DRILL ACTUAL	REPAIRING	CORING	COND. MUD & CSG.	TRIPS	RIG SERVICE	REPAIRING	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOGS	RUN CBL. & CEMENT	WAIT ON CEMENT	RIFFLE UP B.D.P.	TEST @ D.P.	DRILL STEM	PLUG BACK	SQUEEZE CEMENT	FISHING	DIRECTIONAL WORK	SAFETY MEETING	RIG UP TON	WELD BOW							
MORN					1.00	0.25	0.25					3.25	1.50								0.50	1.25					8.00			
DAY													5.00	0.50									2.50				8.00			
EVE														4.00	0.75						0.25		3.00				8.00			
TOTAL					1.00	0.25	0.25					3.25	6.50	4.50	0.75						0.75	1.25	5.50				24.00			

[illegible]

MORNING SHIFT

LICENCE NO.:	WELL NAME AND NO.:	AURORA COLLEGE ET AL	
OPERATOR:	AURORA COLLEGE	CONTRACTOR:	AKITA DRILLING LTD.
SURFACE LOCATION:	68:22:28.04 N 13	UNIQUE I.D.:	300G536830133300
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)	

- (1) Daily Walk Around Inspection
- (2) Detailed Inspection-Weekly (Using Check List)
- (3) H2S Signs Posted (If Required)
- (4) Well License & Stick Diagram Posted
- (5) Flare Lines Staked
- (6) BOP Drills Performed
- (7) Visually Inspect BOPs - Flarelines & Degasser Lines
- (1) Rig Site Health and Safety Meeting (one/one month)
- (2) C.A. O.D.C. Rig Safety Inspection Checklist (one/one month)
- (3) Mast Inspection Before Raising or Lowering
- (4) Crown Saver Checked
- (5) Motor Kills Checked

Yr.	Mo.	DAY	2
REG NO.:	15		
FUEL @ 00:00 HRS.			
REG	110	BOILER	
WEATHER	TEMPERATURE		
	CONDITIONS		
	WIND DIRECTION		
	ROAD CONDITION		

STAN PODULSKY	MURRAY LYLE	SAFETY TOPIC	BOP DRILL
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LAST CANNING TUBING ON LINER	O.D. mm	MIN. I.D.	kg/m	MAKE	GRADE	# OF JOINTS	TOTAL (m)	KB TO CSG.	SET AT (m)	SHAPE SHAKER(S)		RENTALS / SERVICES			Mon	Day	Eve
										NO.	TYPE	TYPE					

CODE NO.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL	
OPER.	TRIPUP & TEARDOWN	DRILL ACTUAL	REAMING	CORING	CORING MUD & CIRC.	TRIPS	RIG SERVICE	REPAIRING	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOGS	RUN CBL. & CEMENT	WAIT ON CEMENT	HUFFLE UP B.O.P	TEST B.O.P.	DRILL STEM	PLUG BACK	SQUEEZE CEMENT	FINING	DIRECTIONAL WORK	SAFETY MEETING	BOP DRILL	DRILL OUT					
MORN		2.00				1.25									2.75							0.25	1.75					8.00
DAY		6.75				0.75	0.25															0.25						8.00
EVE		7.25			0.25		0.25			0.25																		8.00
TOTAL		16.00			0.25	2.00	0.50			0.25					2.75							0.50	1.75					24.00

NO. DRILLING ASSEMBLY (AT END OF TOUR)				BIT RECORD				MUD RECORD				METERS DRILLED				TIME LOG				TIME DETAIL						
NO.	BIT/MILLS	O.D. mm	BIT NO.	211	WATER BASED	X	OIL BASED	TIME	400	600	FROM	TO	DRILL/REAM/CR.	ROTARY R.P.M.	WT. ON BIT	FROM	TO	ELAPSED TIME	CODE							
5	BIT SUB	1.02	SIZE (mm)	215.0	DENSITY	1120	1120	FUNNEL	48	46						0	100	1.00	15	TEST B.O.P.						
4	H.W.D.P.	36.86	ADC CODE	1 1 8	FUNNEL	48	46	W.L. cm/								100	215	1.25	6	TRIPS RIH TEST POP VALVE ON F 650 GOOD						
			MFG.	REED	W.L. cm/			FLCK								215	400	1.75	15	TEST B.O.P. PRESSURE TEST HYDRIL, PIPE RAMS, HCR, MAN HCR						
			Type	EHT11	PH	11.0	11.0													TWO KILL LINE VALVES, CHECK VALVE, SABBING VALVE, INSIDE BOP,						
			SERIAL NO.	CM3310																UPPER & LOWER KELLY COCKS 1400 KPA & 10000 KPA						
			JETS (mm)	5.5 5.5 5.5																10 MIN EACH FUCTION MOTOR KILLS 3 SEC						
			DEPTH IN (m)	155.00																3 FUCTION TEST 1900 PSI TO 2900 PSI 95 SEC PRECHARGE 900 PSI						
			DEPTH OUT (m)																							
			TOTAL METER	18.00																						
			TOTAL HOURS	2.00																						
4	DRILLPIPE STANDS																									
1	DRILLPIPE SINGLES	76.20																								
	KELLY DOWN	11.93																								
	TOTAL	173.00																								
	WT. OF D.C.	5	1000	DRAG dan																						
	WT. OF STRING	9	1000	TORQUE																						
			1000	FILL m																						
DRILLERS SIGNATURE MARK OGILVIE																										

Notes: CHECK CROWN SAVER
TEST POP VALVE POP AT 3000 WITH PIN OUT

MACP
MAX HOOKLOAD 11

LICENCE NO. :		WELL NAME AND NO. : AURORA COLLEGE ET AL		(2) Detailed Inspection-Weekly (Using Check List) (3) H2S Signs Postcard(If Required) (4) Well Logbooks & Stick Diagram Posted (5) Flare Lines Stashed (6) BOP Drills Performed (7) Visually Inspect BOP's - Flarelines & Degasser Lines	
OPERATOR : AURORA COLLEGE		CONTRACTOR : AKITA DRILLING LTD.		(1) Rig Site Health and Safety Meeting (one/crow/month) (2) C.A.,O.D.C. Rig Safety Inspection Checklist(one/crow/month) (3) Mast Inspection Before Raising or Lowering (4) Crown Saver Checked (5) Motor Mills Checked	
SURFACE LOCATION : 68:22:28.04 N 13		UNIQUE I.D. : 300G536830133300		(1) FUEL @ 06:00 HRS. (2) NO. 110 (3) BOILER	
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE : (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		(1) TEMPERATURE (2) CONDITIONS (3) WIND DIRECTION (4) ROAD CONDITION	

- (1) Daily Walk Around Inspection
- (2) Detailed Inspection-Weekly (Using Check List)
- (3) H2S Signs Posted (If Required)
- (4) Well License & Stick Diagram Posted
- (5) Flare Lines Staked
- (6) BOP Drills Performed
- (7) Visually inspect BOP's - Flarelines & Degasser Lines

- (1) Rig Site Health and Safety Meeting (once/a month)
- (2) C.A., O.D.C. Rig Safety Inspection Check (once/a month)
- (3) Mast inspection Before Raising or Lowering
- (4) Crown Saver Checked
- (5) Motor Kills Checked

CH.	R.M.	YEAR 2001	MONTH 8	DAY 2
	MI	REG NO.: 15		
	MI	FUEL @ 06:00 HRS.		
	MI	REG 110	BOLTER	
	MI	WEATHER	TEMPERATURE	
	MI		CONDITIONS	
	MI		WIND DIRECTION	
	MI		ROAD CONDITION	

STAN PODULSKY	MURRAY LYLE	SAFETY TOPIC	GENERAL LEASE COND.
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LAST CASING TUBING OR LINER	O.D. mm		MIN. I.D		kg/m		MAKE		GRADE		# OF JOINTS		TOTAL (m)		KB TO CSG.		SET AT (m)		SHALE SHAKER(S)				RENTALS / SERVICES										Morn	Day	Eve		
																			NO.		TYPE		TYPE														
																			CHANGE SCREENS				ON														
																					TOP		TOP														
																					MIDDLE		MIDDLE														
																				BOTTOM		BOTTOM															
DC. DP SIZE		KG / M		GRADE		MIN. ID		TOOL JT. O.D.		TYPE THREAD		# OF JOINTS		PUMP MANUFACTURER		PUMP TYPE		STROKE LTH.																			
CODE NO.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL										
OPER.	RISEUP & TEARDOWN	DRILL ACTUAL	REAMING	CORING	CORING DRUG & CONC.	TRIPS	RIG SERVICE	REPAIRS	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOGS	RUN CSG. & CEMENT	WASH ON CEMENT	HOIST UP B.O.P.	TEST B.O.P.	DRILL STRING	FLUID BACK	SQUEEZE CEMENT	FINISH	DIRECTIONAL WORK	SAFETY MEETING	BOP DRILL	DRILL OUT														
MORN		2.00				1.25									2.75							0.25	1.75					8.00									
DAY		6.75				0.75	0.25															0.25						8.00									
EVE		7.25			0.25		0.25			0.25																		8.00									
TOTAL		16.00			0.25	2.00	0.50			0.25					2.75							0.50	1.75				24.00										

DRILLING ASSEMBLY (AT END OF TOUR)				BIT RECORD				MUD RECORD				METERS DRILLED				TIME LOG				TIME DETAIL			
	BIT/MILLS	O.D. mm	0.27	BIT NO.	211			WATER BASED	X	OIL BASED		FROM	TO	DRILL/ REAM/CR.	ROTARY R.P.M.	WT. ON BIT	FROM	TO	ELAPSED TIME	CODE			
	BIT SUB		1.02	SIZE (mm)	215.0			TIME	900	1200	1500	173.00	249.00	0	90	5	800	845	0.75	6	TRIPS POOH FOR MUD RING FLOW CHECK AT 164 84 OOH		
5	D.C.		48.72	IADC CODE	1 1 8			DENSITY kg/m3	1100	1105	1110						845	900	0.25	22	BOP DRILL WITH CREW IN POSITION IN 45 SECS		
4	H.W.D.P.		38.88	W.L. cm/ FLCK				FUNNEL VIS s/l	38	44	44						900	945	0.75	2	DRILL 173 183		
				PH	10.0	9.5	9.5										945	1000	0.25	7	RIG SERVICE DFUNCTION ANNULAR O/C 8 SECS		
				TYPE	EHT11												1000	1600	6.00	2	DRILL 183 TO 249		
				SERIAL NO.	CM3310												1600						
				JETS (mm)	9.5 9.5 9.5																		
				DEPTH IN (m)	155.00																		
				DEPTH OUT (m)																			
				TOTAL METER	94.00																		
				TOTAL HOURS	8.75																		
4	DRILLPIPE	STANDS																					
1	DRILLPIPE	SINGLES	151.82																				
	KELLY DOWN	12.31																					
	TOTAL	249.00																					
	WT. OF D.C.	7																					
	WT. OF STRING	12																					
DRILLERS SIGNATURE				MARTY SHERWOOD																			

EVENING SHIFT

LICENCE NO.:		WELL NAME AND NO.: AURORA COLLEGE ET AL	
OPERATOR: AURORA COLLEGE		CONTRACTOR: AKITA DRILLING LTD.	
SURFACE LOCATION: 68:22:28.04 N 13		UNIQUE I.D.: 300G536830133300	
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)	

(1) Daily Walk Around Inspection		QTY.	RM.	YEAR 2001	MONTH 8	DAY 2
(2) Detailed Inspection Weekly (Using Check List)		ML	ML	RIG NO.: 15		
(3) H2S Signs Posted (If Required)		ML	ML	FUEL @ 08:00 HRS.		
(4) Well License & Stick Diagram Posted		ML	ML	RIG 110		
(5) Flare Lines Staked		ML	ML	BOILER		
(6) BOP Drills Performed		ML	ML	TEMPERATURE		
(7) Visually Inspect BOP's - Flarelines & Degasser Lines		ML	ML	CONDITIONS		
(1) Rig Site Health and Safety Meeting (one/crow/month)		ML	ML	WIND DIRECTION		
(2) C.A. O.D.C. Rig Safety Inspection Checklist (one/hg/month)		ML	ML	ROAD CONDITION		
(3) Mast Inspection Before Raising or Lowering		ML	ML			
(4) Crown Saver Checked		ML	ML			
(5) Motor Kils Checked		ML	ML			

STAN PODULSKY										MURRAY LYLE										SAFETY TOPIC									
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LAST CASING TUBING OR LINER	O.D. mm	MIN. I.D.	kg/m	MAKE	GRADE	# OF JOINTS	TOTAL (m)	KB TO CSG.	SET AT (m)	SHALE SHAKER(S)				RENTALS / SERVICES				Morn	Day	Eve	
										NO.	TYPE	TYPE									
										CHANGE SCREENS			YES	NO							
										TOP		TOP									
										MIDDLE		MIDDLE									
DC. DP SIZE	KG / M	GRADE	MIN. I.D.	TOOL JT. O.D.	TYPE THREAD	# OF JOINTS	PUMP MANUFACTURER	PUMP TYPE	STROKE LTH.	BOTTOM		BOTTOM									

CODE NO.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL
OPER.	RISEUP & TEARDOWN	DRILL ACTUAL	REARROW	CORING	COND. MUD & CIRC.	TRIPS	RIG SERVICE	REPAIRS	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOSS	PHN CBL & CEMENT	WAIT ON CEMENT	HOPEL UP B.O.P.	TEST S.A.P.	DRILL STKS	PLUG BACK	SOURCE CEMENT	FINISH	DIRECTIONAL WORK	SAFETY MEETING	BOP DRILL	DRILL OUT				
MORN		2.00				1.25									2.75							0.25	1.75				8.00
DAY		6.75				0.75	0.25															0.25					8.00
EVE		7.25			0.25	0.25				0.25																	8.00
TOTAL		16.00			0.25	2.00	0.50			0.25					2.75							0.50	1.75				24.00

NO. DRILLING ASSEMBLY (AT END OF TOUR)				BIT RECORD				MUD RECORD				METERS DRILLED				TIME LOG				TIME DETAIL						
BIT/ MILLS	O.D. mm	0.27	m	BIT NO.	211			WATER BASED	X	OIL BASED		FROM	TO	DRILL/ REAM/CR.	ROTARY R.P.M.	WT. ON BIT	FROM	TO	ELAPSED TIME	CODE						
BIT SUB		1.02	m	SIZE (mm)	215.0			TIME	1800	2000	2330	249.00	349.00	D	120	6	1600	1645	0.75	2	DRILL 249 TO 259					
D.C.		48.72	m					DENSITY kg/m3	1150	1170	1180					7	1645	1700	0.25	10	DEV. SURVEY					
H.W.D.P.		36.88	m	IADC CODE	1 1 6			FUNNEL VIS m	49	120	160						1700	1730	0.50	2	DRILL 259 - 268					
			m	MFG.	REED			W.L. cm/ FLCK									1730	1745	0.25	7	RIG SERVICE FUNCTION HCR O/C 2 SECS					
			m	Type	EHT11			PH	9.5	9.5	9.5						1745	2345	6.00	2	DRILL FROM 268 TO 349					
			m	SERIAL NO.	CM3310												2345	2400	0.25	5	COND MUD & CIRC					
			m	JETS (mm)	9.5 9.5 9.5			MUD MATERIALS USED				920	@	60	@											
			m	DEPTH IN (m)	155.00			TYPE		QTY	UNITS	SOLIDS CONTROL EQUIPMENT														
			m	DEPTH OUT (m)				DESILTER																		
			m	TOTAL METER	194.00			CENTRIFUGE																		
			m	TOTAL HOURS	16.00																					
13	DRILLPIPE	STANOS						DEVIATION SURVEY																		
1	DRILLPIPE	SINGLES	255.93					DEPTH (m)	245.00	DEVIATION	1.50	DIRECTION														
	KELLY DOWN	8.20	m					BOILER																		
	TOTAL	349.00	m					HRS. RUN																		
	WT. OF D.C.	7	1000	DRAG dan				PH																		
	WT. OF STRING	12	1000	TORQUE				STACK deg																		
				FILL m				MACP																		
	DRILLERS SIGNATURE	MARK OGILVIE						MAX HOOKLOAD																		
								15																		

Notes: CHECK CROWN SAVER

MORNING SHIFT

LICENCE NO.:	WELL NAME AND NO.:	AURORA COLLEGE ET AL	
OPERATOR:	AURORA COLLEGE	CONTRACTOR:	AKITA DRILLING LTD.
SURFACE LOCATION:	68:22:28.04 N 13	UNIQUE I.D.:	300G536830133300
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)	

(1) Daily Walk Around Inspection
(2) Detailed Inspection-Weekly (Using Check List)
(3) H2S Signs Posted(If Required)
(4) Well License & Stick Diagram Posted
(5) Flare Lines Staked
(6) BOP Drills Performed
(7) Visually Inspect BOP's - Flarelines & Degasser Lines

(1) Rig Site Health and Safety Meeting (one/crow/month)
(2) C.A., O.D.C. Rig Safety Inspection Checklist(one/rig/month)
(3) Mast Inspection Before Raising or Lowering
(4) Crown Saver Checked
(5) Motor Kills Checked

QTY.	R.M.	YEAR 2001	MONTH 8	DAY 3
ML	ML	RIG NO.: 15		
ML	ML	FUEL @ 08:00 HRS.		
ML	ML	RIG 185	BOLER	
ML	ML	TEMPERATURE		
ML	ML	CONDITIONS		
ML	ML	WIND DIRECTION		
ML	ML	ROAD CONDITION		

STAN PODULSKY **MURRAY LYLE** **SAFETY TOPIC**

LAST CASING TUBING OR LINER	O.D. mm	MIN. I.D.	kg/m	MAKE	GRADE	# OF JOINTS	TOTAL (m)	KB TO CSG.	SET AT (m)	SHAPE SHAKER(S)			RENTALS / SERVICES												Morn	Day	Even
										NO.	TYPE	TYPE															
										CHANGE SCREENS																	
										TOP		TOP															
										MIDDLE		MIDDLE															
										BOTTOM		BOTTOM															

CODE NO.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL
OPER.	GROUP & TEARDOWN	DRILL ACTUAL	REARMS	CORING	COND. MUD & CIRC.	TRIPS	RIG SERVICE	REPAIRING	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOGS	RUN CSG. & CEMENT	WAIT ON CEMENT	RIPPLE UP B.O.P.	TEST B.O.P.	DRILL STEM	PLUG BACK	SQUEEZE CEMENT	FINISH	DIRECTIONAL WORK	SAFETY MEETING						
MORN		4.50				3.00	0.25			0.25																	8.00
DAY		5.75			0.25	1.50	0.25														0.25						8.00
EVE					0.50	3.50	0.25			0.25	2.75	0.75															8.00
TOTAL		10.25			0.75	8.00	0.75			0.50	2.75	0.75									0.25						24.00

DRILLING ASSEMBLY (AT END OF TOUR)										BIT RECORD										MUD RECORD										METERS DRILLED										TIME LOG										TIME DETAIL									
NO.	BIT/ MBLLS	O.D. mm	0.27	m	BIT NO.	2				WATER BASED	X	OIL BASED		FROM	TO	DRILL/REAM/CR.	ROTARY R.P.M.	WT. ON BIT	FROM	TO	ELAPSED TIME	CODE																																					
5	BIT SUB	1.02	m	SIZE (mm)	215.0					TIME	130	330	530	349.00	372.00	D	80	4	0	130	1.50	6	TRIPSPHOH FLOW CHECK @ 349 , 331, 174 107M .03M3 DIFF																																				
4	D.C.	46.72	m							DENSITY kg/m3	1200	1230	1250				90	6	130	145	0.25	7	RIG SERVICE FUNCTION ANNULAR O/C 8 SECS																																				
	H.W.D.P.	36.86	m	IADC CODE	1 3 7					FUNNEL VIS at W.L. cm/ FLCK	220	220	220						145	315	1.50	6	TRIPS RIH STRAP -.27 M DIFF																																				
			m	MFG.	REED					PH	10.0	10.0	10.0						315	600	2.75	2	DRILL FROM 349 TO 363																																				
			m	Type	HP13G														600	615	0.25	10	DEV. SURVEY																																				
			m	SERIAL NO.	MB5510														615	800	1.75	2	DRILL FROM 363 TO 372																																				
			m	JETS (mm)	11, 11, 11,														800																																								
			m	DEPTH (m)	349.00					MUD MATERIALS USED				REDUCED PUMP SPEED																																													
			m	DEPTH OUT (m)						TYPE	QTY	UNITS					SOLIDS CONTROL EQUIPMENT																																										
			m	TOTAL METER	26.00					DESCO	4	SX					DESILTER																																										
			m	TOTAL HOURS	4.50												CENTRIFUGE																																										
14	DRILLPIPE STANDS		m														HOURS				INTAKE				OVERFLOW UNDERFLOW																																		
1	DRILLPIPE SINGLES	275.15	m														HOURS				INTAKE				OVERFLOW UNDERFLOW																																		
	KELLY DOWN	11.98	m							DEVIATION SURVEY																																																	
	TOTAL	372.00	m							DEPTH (m)	350.00	DEVIATION	1.00																																														
	WT. OF D.C.	7	1000	DRAG dan													HRS. RUN				BOILER PH				STACK deg																																		
	WT. OF STRING	12	1000	TORQUE																																																							
			dan	FILL m																																																							
DRILLERS SIGNATURE MARK OGILVIE										MACP 0										MAX HOOKLOAD 14										Notes: CHECK CROWN SAVER																													

LICENCE NO. : 23

WELL NAME AND NO :

AURORA COLLEGE ET AL

OPERATOR: **AURORA COLLEGE**

CONTRACTOR: **AKITA DRILLING LTD.**

SURFACE LOCATION: 68:22:28.04 N 13

UNIQUE ID. : 300G536830133300

OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)

**CONTRACTORS REPRESENTATIVE : (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE
A CORRECT TO THE BEST OF MY ABILITY)**

- (1) Daily Walk Around Inspection
- (2) Detailed Inspection-Weekly (Using Check List)
- (3) H2S Signs Posted(If Required)
- (4) Well Lognosce & Stick Diagram Posted
- (5) Flare Lines Staked
- (6) BOP Drills Performed
- (7) Visually inspect BOP's - Flarelines & Degasser Lines

- (1) Rig Site Health and Safety Meeting (once a month)
- (2) C.A. O.D.C. Rig Safety Inspection Checklist (once a month)
- (3) Mast Inspection Before Raising or Lowering
- (4) Crown Saver Checked
- (5) Motor Kils Checked

Obs.	R.M.	YEAR 2001	MONTH 8	DAY 3
	AR	RIG NO: 15		
	AR	FUEL @ 08:00 HRS.		
	AR	RIG 185	BOILER	
	AR	WEATHER TEMPERATURE CONDITIONS WIND DIRECTION ROAD CONDITION		
	AR			
	MI			
	MI			

STAN PODULSKY

MURRAY LYLE

SAFETY TOPIC

LOGGING

LAST CASING TUBING OR LINER	O.D. mm		MIN. I.D.		kg/m		MAKE		GRAD2		# OF JOINTS		TOTAL (m)		KB TO CSG.		SET AT (m)		SHALE SHAKER(S)				RENTALS / SERVICES										Morn	Day	Even				
																			NO.		TYPE		TYPE																
																			CHANGE SCREENS				YES		NO														
																			TOP				TOP																
DC . DP SIZE		KG / M		GRADE		MIN. ID		TOOL JT. O.D.		TYPE THREAD		# OF JOINTS		PUMP MANUFACTURER		PUMP TYPE		STROKE LTH.		MIDDLE				MIDDLE															
																				BOTTOM				BOTTOM															
CODE NO.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL												
OPER.	REUP & TEARDOWN	DRILL ACTUAL	READING	CORING	CORR. INFO & CORR.	TRIPS	RIG SERVICE	REPAIRING	CUTOFF DRILL LINE	DEV. SURVEY	WHEELS LOOS	RUN CSG. & CORRENT	WAIT ON CORRENT	HIPPLE UP S.D.P.	TEST S.D.P.	DRILL STEW	PLUG BACK	HOUSEHOLD CORRENT	FEEDING	DIRECTIONAL WORK	SAFETY MEETING																		
MORN		4.50				3.00	0.25			0.25																		8.00											
DAY		5.75				0.25	1.50	0.25													0.25							8.00											
EVE						0.50	3.50	0.25			0.25	2.75	0.75															8.00											
TOTAL		10.25				0.75	8.00	0.75			0.50	2.75	0.75								0.25							24.00											

DRILLING ASSEMBLY (AT END OF TOUR)				BIT RECORD				MUD RECORD				METERS DRILLED				TIME LOG				TIME DETAIL			
NO.	BIT/ MILLS	O.D.mm	0.27	BIT NO.	2	WATER BASED	X	OIL BASED	FROM	TO	DRILL/ REAMER	ROTARY R.P.M.	WT. ON BIT	FROM	TO	ELAPSED TIME	CODE						
	BIT SUB		1.02	SIZE (mm)	215.0	TIME	900	1200	372.00	401.00	D	80	7	800	815	0.25	7	RIG SERVICE FUNCTION PIPE RAMS O/C 2 SECS					
5	D.C.		48.72	IADC CODE	1 3 7	DENSITY kg/m3	1250	1250				90	8	815	1400	5.75	2	DRILL 372 TO 401					
4	H.W.D.P.		38.88	FUNNEL VIS cSt		210	70	70						1400	1415	0.25	5	COND MUD & CIRC					
				NFO.	REED	W.L. cm/ FICK								1415	1545	1.50	6	TRIPS POOH TO LOG FLOW CHECK AT 400 334 160 75 O					
				Type	HP13G	PH	10.0	10.0	4500	152.0	115	0.0		1545	1600	0.25	21	SAFETY MTG. WITH LOGGERS					
				SERIAL NO.	MB5510	MUD MATERIALS USED				REDUCED PUMP SPEED													
				JETS (mm)	11, 11, 11,	TYPE	QTY	UNITS	1020	@	60	@											
				DEPTH IN (m)	349.00					SOLIDS CONTROL EQUIPMENT													
				DEPTH OUT (m)						DESILTER													
				TOTAL METER	52.00					HOURS INTAKE OVERFLOW UNDERFLOW													
				TOTAL HOURS	10.25					CENTRIFUGE													
16	DRILLPIPE STANDS	303.93								HOURS INTAKE OVERFLOW UNDERFLOW													
	DRILLPIPE SINGLES									0.00													
	KELLY DOWN	12.20								HOURS INTAKE OVERFLOW UNDERFLOW													
	TOTAL	401.00								0.00													
	WT. OF D.C.	7		DRAG dn	0					HRS. RUN				BOILER PH STACK deg									
	WT. OF STRING	12		TORQUE	0					0.00 0.0 0				Notes: CHECK CROWN SAVER									
				FILL m	0.00					MACP 0				TRIP VOLUME CAL VOLUME 2.35									
DRILLERS SIGNATURE MARTY SHERWOOD						MAX HOOKLOAD 12				DIFFERENCE .5				ACTUAL VOL 2.40									

EVENING SHIFT

LICENCE NO.:	WELL NAME AND NO.:	AURORA COLLEGE ET AL	(1) Daily Walk Around Inspection (2) Detailed Inspection-Weekly (Using Check List) (3) H2S Signs Posted(If Required) (4) Well License & Stick Diagram Posted (5) Flare Lines Staked (6) BOP Drills Performed (7) Visually Inspect BOP's - Flarelines & Degasser Lines (1) Rig Site Health and Safety Meeting (one/crow/month) (2) C.A. O.D.C. Rig Safety Inspection Checklists(one/rig/month) (3) Mast Inspection Before Raising or Lowering (4) Crown Saver Checked (5) Motor Kils Checked
OPERATOR:	CONTRACTOR:	AURORA COLLEGE	AKITA DRILLING LTD.
SURFACE LOCATION:	UNIQUE I.D.:	68:22:28.04 N 13	300G536830133300
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)	

STAN PODULSKY	MURRAY LYLE	SAFETY TOPIC	LAYING DOWN PIPE
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LAST CANNING TUBING OR LINER	O.D. mm	MIN. I.D.	kg/m	MAKE	GRADE	# OF JOINTS	TOTAL (m)	KB TO CSG	SET AT (m)	SHALE SHAKER(S)			RENTALS / SERVICES										Morn	Day	Eve
										NO.	TYPE	TYPE													
										CHANGE SCREENS															
										TOP		TOP													
										MIDDLE		MIDDLE													
										BOTTOM		BOTTOM													

CODE NO.:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL	
OPER.	GROUPS TEARDOWN	DRILL ACTUAL	REARING	CORING	COND. MUD & CIRC.	TRIPS	RIG SERVICE	REPAIRING	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOGS	RUN CSG. & CEMENT	WAIT ON CEMENT	WIPPLE UP B.O.P.	TEST B.O.P.	DRILL STEM	PLUG BACK	ROUNDEZ CEMENT	PERIOD	DIRECTIONAL WORK	SAFETY MEETINGS							
MORN		4.50				3.00	0.25			0.25																		8.00
DAY		5.75			0.25	1.50	0.25														0.25							8.00
EVE					0.50	3.50	0.25			0.25	2.75	0.75																8.00
TOTAL		10.25			0.75	8.00	0.75			0.50	2.75	0.75									0.25						24.00	

DRILLING ASSEMBLY (AT END OF TOUR)				BIT RECORD				MUD RECORD				METERS DRILLED				TIME LOG				TIME DETAIL				
NO.	BIT/ MILLS	O.D. mm	0.27	BIT NO.	2			WATER BASED		OIL BASED				FROM	TO	DRILL/REAM/C.R.	ROTARY R.P.M.	WT. ON BIT	FROM	TO	ELAPSED TIME	CODE		
5	BIT SUB	1.02	mm	SIZE (mm)	215.0			TIME	1800					401.00					1600	1615	0.25	7	RIG SERVICE FUNCTION BLIND RAMS WHILE OUT OF HOLE O/C 2SECS	
4	D.C.	46.72	mm					DENSITY											1615	1900	2.75	11	WIRE LINE LOGS	
	H.W.D.P.	38.86	mm	IADC CODE	1 3 7			FUNNEL											1900	2015	1.25	6	TRIPS MAKE UP BIT RIH	
			mm	W.F.L.	REED			W.L. cm/ FLCK											2015	2045	0.50	5	COND MUD & CIRC	
			mm	Type	HP13G			PH											2045	2100	0.25	10	DEV. SURVEY	
			mm	SERIAL NO.	MB5510														2100	2315	2.25	6	TRIPS LAY DOWN PIPE TO RUN CSG FLOW CHECK @ 400, 334,160	
			mm	JETS (mm)	11, 11, 11																			
			mm	DEPTH IN (m)	349.00			MUD MATERIALS USED																
			mm	DEPTH OUT (m)	401.00			TYPE	QTY	UNITS														
			mm	TOTAL METER	52.00																			
			mm	TOTAL HOURS	10.25																			
16	DRILLPIPE STANDS	303.93	mm																					
	DRILLPIPE SINGLES		mm																					
	KELLY DOWN	12 22	mm																					
	TOTAL	401.00	mm																					
	WT. OF D.C.	7	1000	DRAG dan																				
	WT. OF STRING	12	1000	TORQUE																				
			1000	FILL m																				
DRILLERS SIGNATURE				MARK OGILVIE												BOILER				Notes: CHECK CROWN SAVER				
																HRS. RUN				STACK deg				
																MACP				0				
																MAX HOOKLOAD				14				

LICENCE NO. :	WELL NAME AND NO. : AURORA COLLEGE ET AL	(2) Detailed Inspection-Weekly (Using Check List) (3) H2S Signs Posted(If Required) (4) Well License & Stick Diagram Posted (5) Flare Lines Staked (6) BOP Drills Performed (7) Visually Inspect BOP's - Firelines & Degasser Lines	NO NO. : 15
OPERATOR : AURORA COLLEGE	CONTRACTOR : AKITA DRILLING LTD.	(1) Rig Site Health and Safety Meeting (one/twice/month) (2) C.A.O.D.C. Rig Safety Inspection Checklists (one/twice/month) (3) Mast Inspection Before Raising or Lowering (4) Crown Saver Checked (5) Motor Kills Checked	FUEL @ 06:00 HRS. NO 160 BOILER
SURFACE LOCATION : 68:22:28.04 N 13	UNIQUE I.D. : 300G536830133300		TEMPERATURE CONDITIONS WIND DIRECTION ROAD CONDITION
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)	CONTRACTORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		

										SAFETY / TOPIC										RUN CSG																																			
LIST CASING TUBING OR LINER	O.D. mm		MIN. I.D.		kg/m		MAKE		GRADE		# OF JOINTS		TOTAL (m)		KB TO CGL		SET A2 (m)		SHALE SHAKER(S)				RENTALS / SERVICES								Morn	Day	Even																						
																			NO.		TYPE		TYPE																																
																			CHANGE SCREENS		YES		NO																																
																					TOP		TOP																																
																				MIDDLE		MIDDLE																																	
																				BOTTOM		BOTTOM																																	
DC. DP SGL		KG / M		GRADE		MIN. ID		TOOL JT. O.D.		TYPE THREAD		# OF JOINTS		PUMP MANUFACTURER		PUMP TYPE		STROKE LTH.																																					
CODE NO.:		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22		23		24		25		26		TOTAL	
OPER.		RIGUP / TREADON W		DRILL ACTUAL		REAMING		CORING		COND. MUD & CIRC.		TRIPS		RIG SERVICE		REPAIR RIG		CUT OFF DRILL LINE		DEV. SURVEY		WIRELINE LOGS		RUN CSG. & CEMENT		WAT ON CEMENT		RIPPLE UP B.O.P.		TEST B.O.P.		DRILL STEM		PLUG BACK		SCHEDULE CEMENT		FISHING		DIRECTIONAL WORK		SAFETY MEETING		WAIT ON B		SET SLIPS									
MORN																								3.75																0.25		4.00								8.00					
DAY																								1.75																0.25				2.00						4.00					
EVE																																																							
TOTAL																								5.50																0.50		4.00		2.00						12.00					

[illegible]

LICENCE NO. :		WELL NAME AND NO. : AURORA COLLEGE ET AL		(2) Detailed Inspection-Weekly (Using Check List) (3) H2S Signs Posted(If Required) (4) Well License & Stick Diagram Posted (5) Flare Lines Staked (6) BOP Drills Performed (7) Visually Inspect BOP's - Flarelines & Degasser Lines		RIG NO. 15 FUEL @ 08:00 HRS. RIG 160 BOILER	
OPERATOR : AURORA COLLEGE		CONTRACTOR : AKITA DRILLING LTD.		(1) Rig Site Health and Safety Meeting (one/month) (2) C.A.O.D.C. Rig Safety Inspection Check-list(one/month) (3) Mast Inspection Before Raising or Lowering (4) Crown Saver Checked (5) Motor Kils Checked		TEMPERATURE CONDITIONS WIND DIRECTION ROAD CONDITION	
SURFACE LOCATION : 68:22:28.04 N 13		UNIQUE I.D. : 300G536830133300					
OPERATORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)		CONTRACTORS REPRESENTATIVE: (I VERIFY AND ACCEPT INFORMATION ON TOUR SHEET TO BE TRUE & CORRECT TO THE BEST OF MY ABILITY)					

MURRAY														SAFETY TOPIC																									
LAST CASING TUBING OR LINER	O.D. mm		MIN. I.D.		kg/m		MAKE		GRADE		# OF JOINTS		TOTAL (m)		KB TO DSG		SET AT (m)		SHALE SHAKER(S)				RENTALS / SERVICES										Morn	Day	Eve				
																			NO.		TYPE		TYPE																
																			CHANGE SCREENS				YES		NO														
																					TOP				TOP														
DC, DP SIZE		KG / M		GRADE		MIN. I.D.		TOOL JT. O.D.		TYPE THREAD		# OF JOINTS		PUMP MANUFACTURER		PUMP TYPE		STROKE LTH.		MIDDLE				MIDDLE															
																				BOTTOM				BOTTOM															
CODE NO.:		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	TOTAL											
OPER.		GROUP & TEARDOWN	DRILL ACTUAL	REAMING	CORING	COND. BRD & CIRC.	TRIPS	RIG SERVICE	REPAIRED	CUT OFF DRILL LINE	DEV. SURVEY	WIRELINE LOGS	RUN CBL. & CEMENT	WAIT ON CEMENT	WIPPLE UP B.D.P.	TEST B.D.P.	DRILL STEM	PLUG BACK	SOURCE CEMENT	FINING	DIRECTIONAL WORK	SAFETY MEETING	WAIT ON B.	SET SLIPS															
MORN													3.75									0.25	4.00						8.00										
DAY													1.75									0.25		2.00					4.00										
EVE																																							
TOTAL													5.50									0.50	4.00	2.00					12.00										

[illegible]

**CANADIAN PETROLEUM ENGINEERING INC.
SUMMARY OF WELL DATA**

NAME OF LOCATION: Aurora College Training Well Inuvik G-53
 GRD ELEVATION: 17.905
 SPUD DATE: 2001-07-30

CONTRACTORS: Akita Equatak
Akita Rig 15

TARGET N/A

TOTAL DEPTH: 401 m PLUGGED BACK 397.5 m
 HOLE

CASING RECORD								
SIZE (mm)	WEIGH T	MAKE	TYPE	GRAD E	SHOE AT	CEMEN T	CEMEN T	NEW OR
244	71.62	Siderco	DST80-LT	BTC	155	P/F	13 t	New
178	47.62	Siderco	DST80-LT	BTC	397.5	P/F	9 t	New

LOG RECORD SURFACE HOLE		
COMPANY	TYPE OF LOG	INTERVAL

LOG RECORD MAIN HOLE			
COMPANY	TYPE OF LOG	INTERVAL	
Schlumberger	Array Induction-SP	155	401
	Comp. CNL-Density	155	401
	Temperature	155	401
	Cement Volume	155	401

CORE RECORD		
COMPANY	FORMATION	INTERVAL

DEVIATION SURVEYS					
DEPTH	INCL. DEG.	INSTRUMENT	DEPTH	INCL. DEG.	INSTRUMENT
28	1/2	totco	245	1 1/2	
60	1/2		350	1	
87	3/4		401	2	
112	3/4				
150	3/4				

CANADIAN PETROLEUM ENGINEERING INC.

BIT RECORD

WELL NAME Aurora College Training Well Inuvik G-53		CONTRACTOR Akita Equatok		RIG NUMBER 15	DATE (Y-M-D) 2001-08-04
SPUD DATE (Y-M-D) 2001-07-30	SPUD TIME 2100	RIG RELEASE DATE (Y-M-D) 2001-08-04	RIG RELEASE TIME 1200	SUPERVISOR Stan Podulsky	TOTAL DEPTH (m) 401

[illegible]

PIPE TALLY SHEET

Page 1 of 1

WELL NAME: **AURORA COLLEGE TEST WELL**

DATE: **01-07-30**

1	14.21	21		41		61		81	
2	14.41	22		42		62		82	
3	14.12	23		43		63		83	
4	14.35	24		44		64		84	
5	14.19	25		45		65		85	
6	14.26	26		46		66		86	
7	13.65	27		47		67		87	
8	14.29	28		48		68		88	
9	14.24	29		49		69		89	
10	14.25	30		50		70		90	
TOTAL 141.97		TOTAL		TOTAL		TOTAL		TOTAL	
11	13.29	31		51		71		91	
12	13.68	32		52		72		92	
13		33		53		73		93	
14		34		54		74		94	
15		35		55		75		95	
16		36		56		76		96	
17		37		57		77		97	
18		38		58		78		98	
19		39		59		79		99	
20		40		60		80		##	
TOTAL 26.97		TOTAL		TOTAL		TOTAL		TOTAL	

TUBING / CASING STRING

Surface

TUBING / CASING

O.D. 244.5 mm

Wt. 71.62 kg/m

Grade DST-80LT

Range 3

Thread Off

Collar LT&C

Make Sederca

SUMMARY

1-10 141.97 m

11-20 26.97 m

21-30 _____ m

31-40 _____ m

41-50 _____ m

51-60 _____ m

61-70 _____ m

71-80 _____ m

81-90 _____ m

91-100 _____ m

Total: 168.94 m

TOTAL PAGE 1 : 168.94 m

ADD: FLOAT SHOE: 0.49 m

ADD: FLOATCOLLAR: 0.40 m

TOTAL LENGTH OF STRING: 169.83 m

TOTAL LENGTH JOINTS OUT: 13.68 m

TOTAL ON HOOK: 156.15 m

NOTE: Circle the joints which have been left out.

Include marker joints in the pipe tally.

TALLIED BY: STAN PODULSKY

REMARKS : Jt. No. 12 stays out.

12 TOTAL # OF JTS FROM PAGE 1

 TOTAL # OF JTS FROM PAGE 2

12 TOTAL # OF JTS ON LOCATION

1 Less # of JTS OUT

11 TOTAL # OF JTS IN THE HOLE

PIPE TALLY SHEET

Page 1 of 1

WELL NAME: AURORA COLLEGE TEST WELL

DATE: 01-08-02

1	12.01	21	13.35	41		61		81	
2	13.34	22	13.34	42		62		82	
3	13.64	23	12.74	43		63		83	
4	13.54	24	13.34	44		64		84	
5	13.10	25	13.34	45		65		85	
6	12.97	26	13.55	46		66		86	
7	13.30	27	13.33	47		67		87	
8	13.48	28	13.25	48		68		88	
9	13.42	29	12.53	49		69		89	
10	13.60	30	13.40	50		70		90	
TOTAL 132.40		TOTAL 132.17		TOTAL		TOTAL		TOTAL	
11	13.28	31	13.38	51		71		91	
12	13.31	32	13.22	52		72		92	
13	13.46	33	13.35	53		73		93	
14	12.99	34	13.56	54		74		94	
15	12.39	35		55		75		95	
16	13.31	36		56		76		96	
17	12.95	37		57		77		97	
18	13.54	38		58		78		98	
19	13.37	39		59		79		99	
20	13.54	40		60		80		##	
TOTAL 132.14		TOTAL 53.51		TOTAL		TOTAL		TOTAL	

TUBING / CASING STRING

Production

TUBING / CASING

O.D. 178 mm

Wt. 47.62 kg/m

Grade DST-80LT

Range 3

Thread Off

Collar LT&C

Make SEDERCA

SUMMARY

1-10 132.40 m

11-20 132.14 m

21-30 132.17 m

31-40 53.51 m

41-50 m

51-60 m

61-70 m

71-80 m

81-90 m

91-100 m

Total: 450.22 m

TOTAL PAGE 1 : 450.22 m

NOTE: Circle the joints which have been left out.

Include marker joints in the pipe tally.

TALLIED BY: STAN PODULSKY

REMARKS : Jts. No. 31, 32, 33, 34 are out.

ADD: FLOAT SHOE: 0.40 m

ADD: FLOATCOLLAR: 0.39 m

TOTAL LENGTH OF STRING: 451.01 m

TOTAL LENGTH JOINTS OUT: 53.51 m

TOTAL ON HOOK: 397.50 m

34 TOTAL # OF JTS FROM PAGE 1

34 TOTAL # OF JTS ON LOCATION

4 Less # of JTS OUT

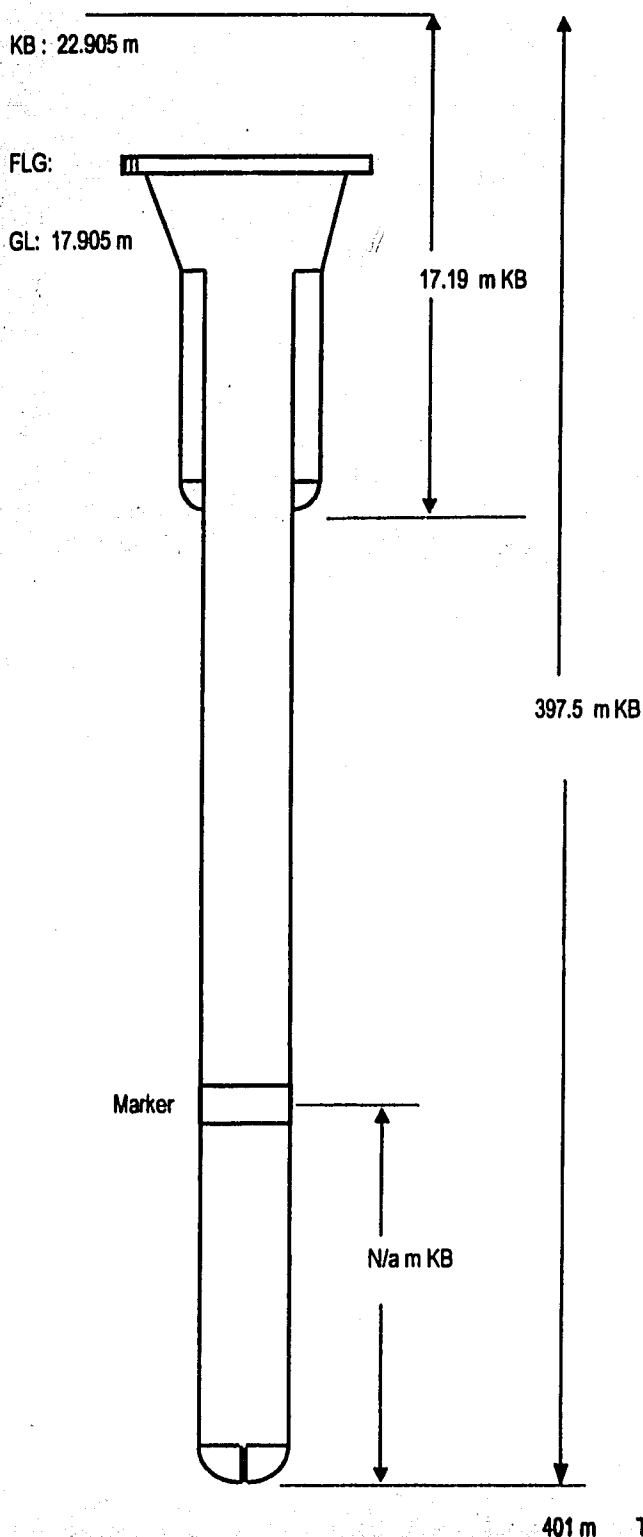
30 TOTAL # OF JTS IN THE HOLE

CPE CEMENTING AND CASING REPORT

TYPE OF STRING: Production String SIZE: 178 mm

NAME OF WELL: Aurora College Training Well Inuvik G-53

LOCATION: Inuvik, NT



NO. OF JOINTS: 30

TALLY: 396.71 m

FLOAT SHOE: 0.40

FLOAT COLLAR: 0.39

OTHER FITTINGS: _____

CENTRALIZERS: 17 weatherford

SCRATCHERS: _____

PLUG USED: Wiper, Cement

CASING SHOE AT: 397.50 m

SHOE BUMPED WITH: 5000 Kpa

SLIP-SEAL ASSEMBLY: MAKE: FMC

MODEL: TC-1A- ENS

CASING HEAD: MAKE: StreamFlo

MODEL: _____

SIZE: 244 x 279

SERIES: 3 MPa

CEMENT USED: 9 TONNES

THEORETICAL CEMENT TOP: Surface (Observed)

TYPE OF CEMENT: P/F

ADDITIVES: _____

CEMENTING COMPANY: Schlumberger

REMARKS: String cemented full length, good cement returns to

Surface.

Rig released at 1200hrs, 2001-08-04

CEMENTER: Jaye Asplund

WELLSITE SUPERVISOR: Stan Podulsky

CASING & CEMENTING REPORT

WELL NAME	AURORA COLLEGE TEST WELL G-53	CASING STRING	Surface
SUPERVISOR	STAN PODULSKY	DATE	01-07-31
CEMENTERS		HOLE SIZE	311 mm
		T.D.	155 m

CASING (as run in the hole - from the bottom, not including marker jts)

# JOINTS	O.D.	kg/m	GRADE	COUPLING	RGE	MAKE	LENGTH
11	244.5	71.62	DST-80LT	LT&C	3	SEDERCA	155.26 m

CASING BOWL		ELEVATIONS		GUIDE SHOE	Weatherford	0.49
MAKE	S/F CROWN	K.B. Elev.	22.91	FLOAT COLLAR	Weatherford	0.40
TYPE	SLIP ON	GRD Elev.	17.91	STAGE COLLAR		
SIZE	11	KB-GRD	5.00	MARKER JOINT		
X	9 5/8	KB-CBF		MARKER JOINT		
RATING	3000					
SER #	96702-15					
		No of PLUGS	2		TOTAL ON HOOK	156.15
		TYPE of PLUGS	Rubber		Stick Up	1.15
					LANDED AT	155.00
					Top of Float Collar	140.82
					Top of Stage Collar	
					Top of Marker Jt #1	
					Top of Marker Jt #2	
					Joints Out	13.68
					Total Casing on Location	168.94
					Cut Off Length	6.40

SCRATCHERS & STOP RINGS

Type and Total No. Run:

Intervals Scratched:

Total No. Stop Rings Used:

CENTRALIZERS

Type and Total No. Run:

Joint #'s Centralized:

SOLID VANE SPIRAL STAND-OFF BANDS

Depth Sat & No. Used: 1 on every joint

CEMENT

ITEM	Tonnes	Class	Type	Additives	Kg/m3	Vol (m3)	Rate (m3 / min)
Pre-Flush			H2O	nil	1000	4.00	0.50
Mix	13	Permafrost			1860	9.80	0.80
Tail-in							
Displace			H2o		1000	5.50	0.60

CEMENTING

Start Mix Time	4:51	hrs	Mud Weight	1170	kg/m3	Vol. Cement returns	2	m3
Start Displ. Time	5:11	hrs	Mud Viscosity	52	sec/l	Vol. Lost Returns		m3
Bump Plug Time	5:22	hrs	Yield Point	10.5	Pa	Calc Cement Top	Surface	mKB
Bump Plug Press	3000	kPa	Open Hole Vol.	10.5	m3	Csg Rotated?	No	
Floats Held OK?	OK.		From		mKB	Slips Set With	n/a	daN
Pipe Recip. Until	N/A	m3 left	To	155	mKB	Cmt Bin Requested?	No	
Pipe Rot. Until	N/A	m3 left	Cmt Head Type	Swadge		Bell Nipple Welded On?	n/a	
Cmt Vol Based on	Calc		Init String Wt	10000	daN	Protector Plate On?	n/a	
plus % Excess	50		Final String Wt	Nil	daN	Primary Seal Install.?	n/a	

Comments:

MAXIMUM ALLOWABLE CASING PRESSURE
AURORA COLLEGE TEST
G-53

Depth of Last Casing String: 155 metres.

Fracture Gradient used: 11 kpa/m.

Mud Density (kg/m ³)	MACP (kpa)
1000	184
1010	169
1020	154
1030	138
1040	123
1050	108
1060	93
1070	78
1080	62
1090	47
1100	32

MACP with Gas To Surface: 1705 kpa.

MAXIMUM ALLOWABLE CASING PRESSURE
AURORA COLLEGE TEST
G-53

Depth of Last Casing String: 155 metres.

Fracture Gradient used: 11 kpa/m.

Mud Density (kg/m ³)	MACP (kpa)
1000	184
1010	169
1020	154
1030	138
1040	123
1050	108
1060	93
1070	78
1080	62
1090	47
1100	32

MACP with Gas To Surface: 1705 kpa.



Newpark Drilling Fluids, Inc.

Calgary Office: (403) 266-7383 (fax) 263-1760

Drilling Fluids Report

WATER BASED MUD REPORT

Report Date	29-Jul-01	Spud Date	30-Jul-01
Measured Depth (m)	0	Total Vert Depth (m)	0
Report #	1	Total Days	0

Operator	Aurora College	Contractor	Akita 15	Present Activity
Supervisor	Stan Podulsky	Rig Manager	Murry Lyle	Rig to Spud
Well Location	Aurora College Inuvik	Well Name	Aurora College Inuvik	AFE #

Drilling Assembly						Noz. Vel. (m/s)	Jet Imp Frc (N)	Pump Pressure (kPa)		Pump Data			
Bit #	Size (mm)	Bit Type	Depth In	Depth Out	Hours	#Num!	#Error	Make/Model	Liner Size (mm)	Stroke Length (mm)	Litres/ Stroke	Strokes/ Min	Output (m3/ min)
	0	IN										0	0.0
Nozzles Sizes (mm)						RPM	Hydral. Pwr At Bit (KW)					0	0.0
0.0	0.0	0.0	0.0	0.0	0.0							0	0.0
Ttl Nozzel Area (mm2)						WT (daN)	Mud Volumes		Circulation Times		Total Pump Output (m3/min)		
							Washout %	0	Minutes	Bottoms Up	Surface-Surface	Circ Time	
							Annular (m3)	String (m3)	Strokes				
Casing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Total Annular Mud Volume (m3)			Overflow (kg/m3)	0	0
Drill Pipe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Total String Mud Volume (m3)		0.0	Underflow (kg/m3)	0	0
Drill Collar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Volume in Tank (m3)		0.0	Hours	0	0
2nd Drill Collar/BHA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Total Circulating Volume (m3)			Other		
	Shear Rate Annulus (sec -1)	Shear Stress Annulus (Pa0)	Equivalent Viscosity (mPa.s)	Reynolds #	Annular Velocities (m/min.)	Annular Pressure Loss kPa (laminar)	Annular Pressure Loss kPa (turbulent)	Actu. Annular Pressure Loss kPa (lam/turb)	String Pressure Loss kPa	Shakers	#1	#2	
Casing	#Error	#Error	#Error	#Error	#Num!	#Error				Mesh 1			
Drill Pipe										Mesh 2			
Drill Collar										Mesh 3			
2nd Drill Collar										Hydrostatic Pressure (kPa)			
Mud Type										Surf. Equip. Press. Loss (kPa)			
										Bit Pressure Loss (kPa)			
										TTL System Press Loss (kPa)			

Mud Properties									
Time	14:36	Filter Cake (mm)	0	Low Gravity Solids (kg/m3)		Low Shear K (Pa.s)	0.44		
Density (kg/m3)		PH ☒ Strip ☐ Meter		High Gravity Solids (kg/m3)		Low Shear n	0.09		
Viscosity (sec/L)		PF					Equiv. Circ. Dens. (kg/m3)		
Fann_600	2	MF		Additional Properties					
Fann_300	1.5	Chlorides (mg/L)							
Fann A.V. (mPa.s)	1.0	Calcium (mg/L)							
Plastic Vis. (mPa.s)	0.5	MBT (kg/m3)				Time Breakdown Analysis			
Yield Point (Pa)	0.5	Sand Vol frac				Drilling	0	Survey	0
Ten_Sec_Gel		Water Vol frac				Tripping	0	Ream & Clean	0
Ten_Min_Gel		Solids Vol frac				Circulation	0	Miscellaneous	24
Fluid Loss (cm3/30min)		Oil Vol frac				Rig Service	0	Total	24

Remarks / Suggestions

1. Fill Mud tank 1 with water +/- 5m3, add 1/2 sx soda ash, mix gel to get to get +/- 150 s/l viscosity.
2. Fill remaining tanks with water, add 1 sx caustic, then mix 130 sxs KCL into this water, you can mix the KCL as fast as you can.
3. When spudding bleed prehydrated gel into KCL to 50 -60 s/l viscosity. If you need to you can use NEWZAN for viscosity as well.
4. If gravel or boulders, raise vis as required with either prehydrated gel or NEWZAN.
5. Losses, slug 5m3 active system with sawdust, 70 kg/m3

Products Used / Costs

Inventory Cost Prior	0.00
Inv. Cost This Report	0.00
Total Inventory Costs	0.00

Warehouse		Service Tech	Craig Shydowski
Address		Address	6314-96st Grande Prairie Alta
	Phone		Phone 780-831-8053

24 Hour Phone (403) 266-7383

In consideration of the furnishing of this report and oral suggestions, it is agreed that Newpark Drilling Fluids, Inc. shall not be liable for any damage resulting from the same and it is to be held harmless.



Newpark Drilling Fluids, Inc.

Calgary Office: (403) 266-7383 (fax) 263-1760

Drilling Fluids Report

WATER BASED MUD REPORT

Report Date	31-Jul-01	Spud Date	30-Jul-01
Measured Depth (m)		Total Vert Depth (m)	
87		87	
Report #	2	Total Days	1

Operator	Aurora College	Contractor	Akita 15	Present Activity
Supervisor	Stan Podulsky	Rig Manager	Murry Lyle	Drilling surface
Well Location	Aurora College Inuvik	Well Name	Aurora College Inuvik	AFE #

Drilling Assembly						Noz. Vel.	Jet Imp Frc	Pump Pressure (kPa)				Pump Data			
Bit #	Size (mm)	Bit Type	Depth In	Depth Out	Hours	(m/s)	(N)	750	Liner Size	Stroke Length	Litres/ Stroke	Strokes/ Min	Output (m3/min)		
1	311	HP-11	0	IN	12	37.7	1385.2	Make/Model	(mm)	(mm)					
Nozzles Sizes (mm)					RPM	Hydral. Pwr At Bit (KW)		Cont. Emeco	152.4	203	11.1	87	1.0		
19.0	19.0	19.0	0.0	0.0	0.0	80	28.5	Cont. Emeco	152	203	11.1	87	1.0		
Ttl Nozzel Area (mm2)			850.2		WT (daN)	Mud Volumes				Circulation Times			Total Pump Output (m3/min)	1.9	
	Degrees	Depth(m)			Washout %	5		Bottoms Up	Surface-Surface	Circ Time	Solids Control Equipment				
		0			Annular	String (m3)	Minutes	3	3	21					
	O.D. (mm)	I.D. (mm)	Length (m)		(m3)		Strokes	239	251	1828	Centrifuge	#1	#2		
Casing		0.0	0.0	0.0	0.0	0.0	0.0	Total Annular Mud Volume (m3)			5.3	Overflow (kg/m3)	0	0	
Drill Pipe		114.3	69.8	30.0	2.1	0.1	0.1	Total String Mud Volume (m3)			0.3	Underflow (kg/m3)	0	0	
Drill Collar		158.8	57.1	47.0	2.8	0.1	0.1	Volume In Tank (m3)			35.0	Hours	0	0	
2nd Drill Collar/BHA		203.2	71.4	10.0	0.5	0.0	0.0	Total Circulating Volume (m3)			40.6	Other			
	Shear Rate Annulus (sec -1)	Shear Stress Annulus (Pa0)	Equivalent Viscosity (mPa.s)	Reynolds #	Annular Velocities (m/min.)	Annular Pressure Loss kPa (laminar)	Annular Pressure Loss kPa (turbulent)	Actu. Annular Pressure Loss kPa (lam/turb)	String Pressure Loss kPa	Shakers	#1	#2			
Casing		622.9	22.6	36.4	11090.0	-188.2	0.0	0.0	0.0	Mesh 1	110	110			
Drill Pipe		50.5	11.4	226.3	428.1	26.3	7.0	0.6	7.0	Mesh 2	110	110			
Drill Collar		75.1	12.7	169.7	507.8	30.2	15.7	1.7	15.7	Mesh 3					
2nd Drill Collar		132.1	14.9	112.5	676.0	37.6	5.5	0.9	5.5	111.6					
Mud Type	KCL,Gel,Polmer	Totals		Critical Velocity (m/min)	117.4	28.2	3.1	28.2	2036.4	TTL System Press Loss (kPa)	3711.9				
										Hydrostatic Pressure (kPa)	960.15				
										Surf. Equip. Press. Loss (kPa)	760.3				
										Bit Pressure Loss (kPa)	887.0				

Mud Properties									
Time	10:33	Filter Cake (mm)	0	Low Gravity Solids (kg/m3)	209	Low Shear K (Pa.s)		3.83	
Density (kg/m3)	1125	PH ☒ Strip ☐ Meter	9.00	High Gravity Solids (kg/m3)		Low Shear n		0.27	
Viscosity (sec/L)	54	PF				Equiv. Circ. Dens. (kg/m3)		1149	
Fann_600	63	MF		Additional Properties					
Fann_300	42	Chlorides (mg/L)							
Fann A.V. (mPa.s)	31.5	Calcium (mg/L)							
Plastic Vis. (mPa.s)	21.0	MBT (kg/m3)	20			Time Breakdown Analysis			
Yield Point (Pa)	10.5	Sand Vol frac	1			Drilling	2	Survey	0
Ten_Sec_Gel	6	Water Vol frac				Tripping	0	Ream & Clean	0
Ten_Min_Gel	15	Solids Vol frac				Circulation	0	Miscellaneous	22
Fluid Loss (cm3/30min)	nc	Oil Vol frac				Rig Service	0	Total	24

Remarks / Suggestions				Products Used / Costs			
1. Maintain viscosity, 50-60 s/l or as required to clean hole with prehydrated gel and Newzan. Alternate between the them. Add 1-2 sxs newzan 1hour/sx, then next time add prehydrated gel. Prior to running casing raise vis 70-80 s/l, CHECK WITH STAN FIRST,use prehydrated gel for this. If any tight hole run a sweep of prehydrated gel. 2. Add 5 sxs KCL for every 1 m3 prehydrated gel you add, should not need to run any water from now until surface hole TD, but if you do, remember to add 5 sxs KCL for every 1m3 water you add. 3. PH-9 with caustic as required. 4. Weight as low as practical with all solids control equipment. 5. If foaming, there is defoamer on location. 6. Mix 1 sx Sulfite(corrosion inhibitor) every 24 hours.				Product	Units	/Unit	Total
				Caustic	1	0.00	0.00
				Soda Ash	1	0.00	0.00
				KCL	150	0.00	0.00
				Defoamer	1	0.00	0.00
				Aquegel	11	0.00	0.00
Remarks 07/30/01-Rig to spud, spud well 22:00, with KCL, gel, poly mud, drill to 32m				Inventory Cost Prior			0.00
				Inv. Cost This Report			0.00
				Total Inventory Costs			0.00

Warehouse		Service Tech	Craig Shydowski
Address		Address	6314-96st Grande Prairie alta
Phone		Phone	780-831-8053

24 Hour Phone (403) 266-7383

In consideration of the furnishing of this report and oral suggestions, it is agreed that Newpark Drilling Fluids, Inc. shall not be liable for any damage resulting from the same and it is to be held harmless.



Newpark Drilling Fluids, Inc.

Calgary Office: (403) 266-7383 (fax) 263-1760

Drilling Fluids Report

WATER BASED MUD REPORT

Report Date	02-Aug-01	Spud Date	30-Jul-01
Measured Depth (m)		Total Vert Depth (m)	
155		155	
Report #	3	Total Days	3

Operator	Aurora College	Contractor	Akita 15	Present Activity
Supervisor	Stan Podulsky	Rig Manager	Murry Lyle	Drill cement
Well Location	Aurora College Inuvik	Well Name	Aurora College Inuvik	AFE #

Drilling Assembly						Noz. Vel. (m/s)	Jet Imp Frc (N)	Pump Pressure (kPa)		Pump Data			
Bit #	Size (mm)	Bit Type	Depth In	Depth Out	Hours			3230		Liner Size (mm)	Stroke Length (mm)	Litres/ Stroke	Strokes/ Min
2	215	EHT-11	155	IN		82.6	1629.1	Make/Model					Output (m3/ min)
Nozzles Sizes (mm)						RPM	Hydral. Pwr At Bit (KW)	Cont. Emsco	152.4	203	11.1	95	1.1
9.5	9.5	9.5	0.0	0.0	0.0	80	74.6	Cont. Emsco	152	203	11.1	0	0.0
Ttl Nozzel Area (mm2)			212.5	WT (daN)		Mud Volumes		Circulation Times			Total Pump Output (m3/min)		
Degrees		Depth(m)	3	Washout %		0		Bottoms Up	Surface-Surface	Circ Time			
O.D. (mm)		I.D. (mm)	Length (m)	Annular (m3)		String (m3)		Minutes	3	4	32	Solids Control Equipment	
								Strokes	331	379	3075	Centrifuge	#1 #2
Casing		244.0	216.8	150.0	4.0	0.6		Total Annular Mud Volume (m3)		3.7	Overflow (kg/m3)	0	0
Drill Pipe		114.3	69.8	108.0	-1.1	-0.2		Total String Mud Volume (m3)		0.5	Underflow (kg/m3)	0	0
Drill Collar		158.8	57.1	46.0	0.8	0.1		Volume In Tank (m3)		30.0	Hours	0	0
2nd Drill Collar/BHA		158.8	57.1	1.0	0.0	0.0		Total Circulating Volume (m3)		34.2	Other		
		Shear Rate Annulus (sec -1)	Shear Stress Annulus (Pa0)	Equivalent Viscosity (mPa.s)	Reynolds #	Annular Velocities (m/min.)	Annular Pressure Loss kPa (laminar)	Annular Pressure Loss kPa (turbulent)	Actu. Annular Pressure Loss kPa (lam/turb)	String Pressure Loss kPa	Shakers	#1 #2	
Casing		178.2	9.5	53.2	1425.6	39.7	55.5	10.2	55.5		Mesh 1	110	110
Drill Pipe		185.6	9.6	51.5	1480.6	40.6	-16.0	-3.0	-16.0	399.1	Mesh 2	110	110
Drill Collar		524.9	11.8	22.5	2984.8	64.1	38.7	15.1	38.7	450.2	Mesh 3		
2nd Drill Collar		524.9	11.8	22.5	2984.8	64.1	0.8	0.3	0.8	9.8	Hydrostatic Pressure (kPa)		1703.0
Mud Type		KCL,Gel,Polmer	Totals	Critical Velocity (m/min)		95.8	79.1	22.5	79.1	859.0	Surf. Equip. Press. Loss (kPa)		414.4
											Bit Pressure Loss (kPa)		4233.9
											TTL System Press Loss (kPa)		5586.3

Mud Properties

Time	4:48	Filter Cake (mm)	0	Low Gravity Solids (kg/m3)	200	Low Shear K (Pa.s)	3.30
Density (kg/m3)	1120	PH ☒ Strip ☐ Meter	12.00	High Gravity Solids (kg/m3)	-17833	Low Shear n	0.20
Viscosity (sec/L)	47	PF	.76	Additional Properties		Equiv. Circ. Dens.(kg/m3)	1159
Fann_600	34	MF	.9				
Fann_300	23	Chlorides (mg/L)	30000				
Fann A.V. (mPa.s)	17.0	Calcium (mg/L)	200				
Plastic Vis. (mPa.s)	11.0	MBT (kg/m3)	20				
Yield Point (Pa)	6.0	Sand Vol frac	1				
Ten_Sec_Gel	4.5	Water Vol frac	95				
Ten_Min_Gel	6	Solids Vol frac	5				
Fluid Loss (cm3/30min)	nc	Oil Vol frac	0				

Remarks / Suggestions

1. Maintain viscosity with NEWZAN only for now, 50-60 s/l. Mix NEWZAN at 1 hour/sx
2. Mix 1 pallet of KCL now, then maintain, with 10 sxs/tour.
3. Mix 1 sx soda ash over 1 hour.
4. PH-9 with caustic when required.
5. Add 1 sx sulfite(corrosion inhibitor) once every 24 hours.
6. There is defoamer on location.

8-01-01-Drill 32 41m, wrk tight hole, drill and survey to 144m, wiper trip. Drill to 155m, circ 1/2 hour, Pooh to run casing.
8-02-01-Run casing, cement, nipple up and pressure test.

Products Used / Costs

Product	Units	/Unit	Total
Aquagel	24	0.00	0.00
Defoamer	1	0.00	0.00
KCL	50	0.00	0.00
Newzan	7	0.00	0.00

Inventory Cost Prior	0.00
Inv. Cost This Report	0.00
Total Inventory Costs	0.00

Warehouse		Service Tech	Craig Shydlowski
Address		Address	6314-96st Grande Prairie alta
Phone		Phone	780-631-9053

24 Hour Phone (403) 266-7383

In consideration of the furnishing of this report and oral suggestions, it is agreed that Newpark Drilling Fluids, Inc. shall not be liable for any damage resulting from the same and it is to be held harmless.



Newpark Drilling Fluids, Inc.

Calgary Office: (403) 266-7383 (fax) 263-1760

Drilling Fluids Report

WATER BASED MUD REPORT

Report Date	02-Aug-01	Spud Date	30-Jul-01
Measured Depth (m)		Total Vert Depth (m)	
310		310	
Report #	4	Total Days	3

Operator	Aurora College	Contractor	Akita 15	Present Activity
Supervisor	Stan Podulsky	Rig Manager	Murry Lyle	
Well Location	Aurora College Inuvik	Well Name	Aurora College Inuvik	AFE #

Drilling Assembly						Noz. Vel.	Jet Imp Frc	Pump Pressure (kPa)		Pump Data				
Bit #	Size (mm)	Bit Type	Depth In	Depth Out	Hours	(m/s)	(N)	6430	Liner Size	Stroke Length	Litres/ Stroke	Strokes/ Min	Output (m3/ min)	
2	215	EHT-11	155		10	98.2	2407.8	Make/Model	(mm)	(mm)				
Nozzles Sizes (mm)					RPM	Hydral. Pwr At Bit (KW)		Cont. Emaco	152.4	203	11.1	113	1.3	
9.5	9.5	9.5	0.0	0.0	0.0	80	131.1	Cont. Emaco	152	203	11.1	0	0.0	
Ttl Nozzel Area (mm2)			212.5		WT (daN)	Mud Volumes		Circulation Times			Total Pump Output (m3/min)		1.3	
		Degrees	Depth(m)	4		Washout %		4		Bottoms Up	Surface-Surface	Circ Time		
		0				Annular	String (m3)	Minutes	6	7	33	Solids Control Equipment		
		O.D. (mm)	I.D. (mm)	Length (m)		Annular		Strokes	707	808	3774	Centrifuge	#1	#2
Casing		244.0	216.8	150.0		4.0	0.6	Total Annular Mud Volume (m3)			7.9	Overflow (kg/m3)	0	0
Drill Pipe		114.3	69.8	263.0		3.1	0.4	Total String Mud Volume (m3)			1.1	Underflow (kg/m3)	0	0
Drill Collar		158.8	57.1	46.0		0.8	0.1	Volume in Tank (m3)			33.0	Hours	0	0
2nd Drill Collar/BHA		158.8	57.1	1.0		0.0	0.0	Total Circulating Volume (m3)			42.0	Other		
		Shear Rate Annulus (sec -1)	Shear Stress Annulus (Pa0)	Equivalent Viscosity (mPa.s)	Reynolds #	Annular Velocities (m/min.)	Annular Pressure Loss kPa (laminar)	Annular Pressure Loss kPa (turbulent)	Actu. Annular Pressure Loss kPa (lam/turb)	String Pressure Loss kPa	Shakers	#1	#2	
Casing		172.9	28.9	155.8	605.3	47.2	157.6	15.7	157.6		Mesh 1	110	110	
Drill Pipe		161.7	28.4	163.5	520.5	43.3	118.7	12.6	118.7	1520.7	Mesh 2	110	110	
Drill Collar		431.8	34.6	80.2	882.4	64.6	113.4	23.3	113.4	704.4	Mesh 3			
2nd Drill Collar		431.8	34.6	80.2	882.4	64.6	2.5	0.5	2.5	15.3				
Mud Type	KCL,Gel,Polmer	Totals		Critical Velocity (m/min)		172.7	392.2	52.1	392.2	2240.4	TTL System Press Loss (kPa)		9405.2	
											Hydrostatic Pressure (kPa)		3558.1	
											Surf. Equip. Press. Loss (kPa)		514.9	
											Bit Pressure Loss (kPa)		6257.7	

Mud Properties

Time	20:21	Filter Cake (mm)		Low Gravity Solids (kg/m3)	284	Low Shear K (Pa.s)	6.52
Density (kg/m3)	1170	PH ☒ Strip ☐ Meter	11.00	High Gravity Solids (kg/m3)	-26924	Low Shear n	0.28
Viscosity (sec/L)	94	PF	.18	Equiv. Circ. Dens.(kg/m3)			
Fann_600	91	MF	.5	Additional Properties			
Fann_300	71	Chlorides (mg/L)	43000				
Fann A.V. (mPa.s)	45.5	Calcium (mg/L)	200				
Plastic Vis. (mPa.s)	20.0	MBT (kg/m3)	50	Time Breakdown Analysis			
Yield Point (Pa)	25.5	Sand Vol frac	1	Drilling	0	Survey	0
Ten_Sec_Gel	10.5	Water Vol frac	92.5	Tripping	0	Ream & Clean	0
Ten_Min_Gel	18	Solids Vol frac	7.5	Circulation	0	Miscellaneous	0
Fluid Loss (cm3/30min)	nc	Oil Vol frac	0	Rig Service	0	Total	0

Remarks / Suggestions

1. Add 1-2 more sacs desco, to thin mud back a bit. 70-80 s/l viscosity. If vis starts to rise again, check with STAN, he may want to add water.
2. KCL content good for now.
3. PH-9 with caustic when required.
4. Weight as low as practical with all solids control equipment.

Thanks Craig

Products Used / Costs

Inventory Cost Prior	0.00
Inv. Cost This Report	0.00
Total Inventory Costs	0.00

Warehouse		Service Tech	Craig Shydlowski
Address		Address	6314-96st Grande Prairie Alta
Phone		Phone	780-831-8063

24 Hour Phone (403) 266-7383

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Newpark Drilling Fluids, Inc.

Calgary Office: (403) 266-7383 (fax) 263-1780

Drilling Fluids Report

WATER BASED MUD REPORT

Report Date	03-Aug-01	Spud Date	30-Jul-01
Measured Depth (m)	Total Vert Depth (m)		
402	402		
Report #	5	Total Days	4

Operator	Aurora College	Contractor	Akita 15	Present Activity
Supervisor	Stan Podulsky	Rig Manager	Murry Lyle	
Well Location	Aurora College Inuvik	Well Name	Aurora College Inuvik	AFE #

Drilling Assembly						Noz. Vel.	Jet Imp Frc	Pump Pressure (kPa)		Pump Data			
Bit #	Size (mm)	Bit Type	Depth In	Depth Out	Hours	(m/s)	(N)	4650	Liner Size	Stroke Length	Litres/ Stroke	Strokes/ Min	Output (m3/ min)
3	215	HP-13G	349	IN		71.9	1922.0	Make/Model	(mm)	(mm)			
Nozzles Sizes (mm)					RPM	Hydral. Pwr At Bit (KW)		Cont. Emsco	152.4	203	11.1	113	1.3
11.1	11.1	11.1	0.0	0.0	0.0	80	76.7	Cont. Emsco	152	203	11.1	0	0.0
Ttl Nozzel Area (mm2)		290.2		WT (daN)	Mud Volumes		Circulation Times				Total Pump Output (m3/min)		1.3
	Degrees	Depth(m)	5	Washout %	4	Minutes	Bottoms Up	Surface-Surface	Circ Time	Solids Control Equipment			
		0		Annular (m3)	String (m3)	8	9	20					
	O.D. (mm)	I.D. (mm)	Length (m)			Strokes	931	1064	2232	Centrifuge	#1	#2	
Casing	244.0	216.8	150.0	4.0	0.6	Total Annular Mud Volume (m3)				10.4	Overflow (kg/m3)	0	0
Drill Pipe	114.3	69.8	355.0	5.6	0.8	Total String Mud Volume (m3)				1.5	Underflow (kg/m3)	0	0
Drill Collar	158.8	57.1	46.0	0.8	0.1	Volume In Tank (m3)				13.0	Hours	0	0
2nd Drill Collar/BHA	158.8	57.1	1.0	0.0	0.0	Total Circulating Volume (m3)				24.8	Other		
	Shear Rate Annulus (sec -1)	Shear Stress Annulus (Pa0)	Equivalent Viscosity (mPa.s)	Reynolds #	Annular Velocities (m/min.)	Annular Pressure Loss kPa (laminar)	Annular Pressure Loss kPa (turbulent)	Actu. Annular Pressure Loss kPa (lam/turb)	String Pressure Loss kPa	Shakers	#1	#2	
Casing	158.0	33.4	211.7	485.3	47.2	195.7	15.4	195.7		Mesh 1	110	110	
Drill Pipe	147.7	32.7	221.6	418.5	43.3	266.5	22.5	266.5	1990.1	Mesh 2	110	110	
Drill Collar	394.5	44.7	113.4	680.6	64.6	146.4	22.9	146.4	683.0	Mesh 3			
2nd Drill Collar	394.5	44.7	113.4	680.6	64.6	3.2	0.5	3.2	14.8	Hydrostatic Pressure (kPa)			5028.1
Mud Type	KCL,Gel,Polmer	Totals	Critical Velocity (m/min)	192.9	611.8	61.3	611.8	2688.0	Surf. Equip. Press. Loss (kPa)			561.1	
										Bit Pressure Loss (kPa)			3658.8
										TTL System Press Loss (kPa)			7519.7

Mud Properties

Time	14:15	Filter Cake (mm)	0	Low Gravity Solids (kg/m3)	459	Low Shear K (Pa.s)	6.70		
Density (kg/m3)	1275	PH ☒ Strip ☐ Meter	10.00	High Gravity Solids (kg/m3)	-50362	Low Shear n	0.32		
Viscosity (sec/L)	150	PF	.17			Equiv. Circ. Dens.(kg/m3)	1408		
Fann_800	105	MF	.38	Additional Properties					
Fann_300	95	Chlorides (mg/L)	38000						
Fann A.V. (mPa.s)	52.5	Calcium (mg/L)	220						
Plastic Vis. (mPa.s)	10.0	MBT (kg/m3)	85			Time Breakdown Analysis			
Yield Point (Pa)	42.5	Sand Vol frac	1			Drilling	19.3	Survey	0
Ten_Sec_Gel	22	Water Vol frac	86			Tripping	0	Ream & Clean	0.8
Ten_Min_Gel	27	Solids Vol frac	14			Circulation	0	Miscellaneous	4
Fluid Loss (cm3/30min)	nc	Oil Vol frac	0			Rig Service	0	Total	24

Remarks / Suggestions

- No additions required at this time.
- If you want to thin mud prior to cementing, add 4-5 sxs desco, and a good stream of water. Will also have to add 20 sxs KCL with extra water.

Thanks Craig

08/02/01-Test BOP, Drill out, mud rings at 164m, drill ahead to 349m.

Products Used / Costs

Product	Units	/Unit	Total
Aquagel	2	25.10	50.20
Defoamer	1	155.62	155.62
KCL	82	18.16	1489.12
Newzan	2	459.49	918.98
Soda Ash	1	22.57	22.57
Desco	4	57.61	230.44

Inventory Cost Prior	8108.62
Inv. Cost This Report	2668.93
Total Inventory Costs	10873.55

Warehouse		Service Tech	Craig Shydowski
Address		Address	6314-96st Grande Prairie alta
Phone		Phone	780-631-8053

24 Hour Phone (403) 266-7383

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ONSHORE DRILLING RIG
INSPECTION REPORT

Well Name: Nucora Training Well 15-11 R-55 ADW: 1515
Operator: Beura Energy Spud/Reentry Date: July 31, 2001
Contractor: AKila Date of Inspection: Aug 2, 2001
Rig: 15 Time of Inspection: 14:00 hrs.

S	U	NA	Satisfactory(S) Unsatisfactory(U) Not Applicable(NA)
RIG SAFETY - GENERAL*			
☒			1. Recording of all required information in tour reports. 174, 175
☒			2. Posting of Authority to Drill a Well (ADW) and Drilling Program Approval (DPA). 103(a)
☒			3. Well control procedures posted. 103(b)
☒			4. Production testing: ESD on wellhead is properly maintained and inspected. Production & Conservation Regulations 46(1),(2)&(3)
☒			5. Proper electrical wiring and equipment installed and maintained. 38, 133(1)
☒			6. Accumulator at required distance from well and in satisfactory condition. 13(1)(a), 60(7)(e), 131(1)(a)
☒			7. Boiler(s) inspected at the required interval and by qualified personnel. OSH 6.4, 6.5, 6.8(1)
☒			8. Relief valves on pressure vessels tested every 12 months. Production & Conservation Regulations 62(1)(b)
☒			9. Engine shut off controls installed and function tested. Installations Regulations 13(1),(4),(5)&(6)
☒			10. Engine exhausts properly connected with required safety features. Installations Regulations 13(1),(3),(4)&(5)
☒			11. Pipe racks in good condition. 30(1)
☒			12. Lease construction (egress). Production & Conservation Regulations. 44
☒			13. Each work area has a minimum two exits, with doors hinged to open outwards. OGOSHR** 3.1 and Installations Regulations 19(1)(a)
☒			14. Any defective machinery should be repaired. 13(1)(a)
☒			15. Alter any procedure that is unsafe. 13(1)(b)
☒			16. Minimum volume of active mud system is 65 cubic meters. 125
☒			17. Geograph functional and deviation surveys every 150m. 124(1)(a), 128(1)
☒			18. WHMIS labels in use and MSDS's available. OGOSHR** 11.29, 11.30
☒			19. Adequate lighting provided in all working areas. OGOSHR** 7.1 to 7.4, 7.6
☒			20. If greater than 1% by volume of H2S gas is produced does flare stack meet requirements. 112(4)(d)
☒			21. Sour service equipment meets requirements. Production & Conservation Regulations 48(4)
☒			22. Pump lines properly installed, securely tied down and pressure tested. 111(c), 114(2), 115(a)
☒			23. Driller's and BOP controls marked. 60(7)(a) and OGOSHR** 15.11
☒			24. Wind indicators. 21
☒			25. General housekeeping. 21, 149
PERSONNEL SAFETY*			
☒			26. Personnel has valid first aid, CPR, WHMIS, TDG, BOP tickets. 147(b), 150 and OGOSHR** 18.13
☒			27. Adequate first aid equipment and facilities. OGOSHR** 17.9 to 17.14
☒			28. Emergency procedures and evacuation plan in place. OGOSHR** 18.9 to 18.13
☒			29. Safety meetings documented in tour sheets. 175(4)(m)
☒			30. Respiratory protective system NIOSH certified and meets the related CSA requirements. OGOSHR** 13.7, 13.8
☒			31. Escape line located at the monkey board and properly installed. OGOSHR** 13.11
☒			32. Elimination of potential hazardous conditions. 13(1), 21, 30(1), 130(1),(2)&(3)
☒			33. Required personnel safety equipment is provided. OGOSHR** 5.2(3)(b)(ii), 8.4, 9.2(2)(a), 13.1 to 13.6, 13.7(2), 13.9, 13.10, 14.13(1)
☒			34. Smoking regulations observed. 158(1)
☒			35. Fire detection & protection systems adequate, properly maintained and tested. 13(1)(a), OGOSHR** 13.16, 13.17 and Installations Regulations 31.5
☒			36. Gas detection system adequate, properly maintained and tested (where applicable). 13(1)(a) and Installations Regulations 32(4)(a)&(4)(b)
☒			37. Adequate communication equipment in place. Production and Conservation Regulations 51
☒			38. Adequate signage. 21, 158(4) and OGOSHR** 11.15(1), 18.5
☒			39. Adequate contingency plans, equipment and supplies. 79, 135, 136
DERRICK/RIG FLOOR/SUBSTRUCTURE SAFETY*			
☒			40. Rig mast properly inspected and documented. 30(1) - CAODC RP3.0
☒			41. Substructure in satisfactory condition with no visible damage. 30(1)
☒			42. Derrick name plate attached. 30(1)
☒			43. Drilling line in good condition, regular slip and cut program in place. 30(1)
☒			44. Hoisting system adequate and in satisfactory condition. 30(1)
☒			45. Crown saver installed and working properly. 13(1)(a), 21
☒			46. Weight indicator installed and working. 30(1)
☒			47. Tongs and slips in good condition. 13(1)(a)
☒			48. Safety cables attached to tongs, weight indicator, Kelly hose and mud pump lines. 13(3)(f)
☒			49. Braking system is in satisfactory condition. 13(1)(a), 21, 30(1)
BLOWOUT PREVENTION EQUIPMENT - SAFETY*			
☒			50. BOP stack shop serviced every three years. 30(1)
☒			51. Pressure rating of BOP is > 20 mPa and > 50% of maximum bottom hole pressure. 107(2)
☒			52. Pressure testing of BOP system adequate. 114(2), 115, 116(2)(b)
☒			53. Configuration of stack is complete. 60(9), 62(a), 107(4), 108(b)
☒			54. BOP controls and accumulator are adequate and in satisfactory condition. 13(1)(a), 60(7)(8), 131(1)(a)
☒			55. BOP equipment function tested and results recorded. 131(3)(a),(b)&(c)

FRENCH TRANSLATION VERSION AVAILABLE UPON REQUEST ONLY - LA TRADUCTION FRANÇAISE DISPONIBLE SUR DEMANDE SEULEMENT

*Unless otherwise stated, all quoted regulations refer to the Canada Oil & Gas Drilling Regulations (OGDR)

Other Legislation: OGOSHR, Oil & Gas Occupational Safety and Health Regulations

CLC, Canada Labour Code - Part II

White - File

Pink - Company Representative

Yellow - Inspector

Goldenrod - Contractor Representative

continued on page 2

ONSHORE DRILLING RIG INSPECTION REPORT

Well Name: 151000 - Training well - T-1000K B 53ADW: 1915

S	U	NA	Satisfactory(S) Unsatisfactory(U) Not Applicable(NA)
BLOWOUT PREVENTION EQUIPMENT - SAFETY* (continued)			
☒	☐	☐	56. BOP drills conducted and recorded in tour sheets. 151((f)&(g)), 175(4)(n)
☒	☐	☐	57. Up to date kill sheet posted in the dog house or manifold building. 103(b)
☒	☐	☐	58. BOP stack, choke and kill lines and manifold properly winterized. 62(b)
☒	☐	☐	59. Hydraulic control lines to the BOP stack are fire resistant. 60(3)
☒	☐	☐	60. Upper and lower kelly cocks installed, key available. 109(a)
☒	☐	☐	61. Air drilling - rotating head in use, adequate mud in tanks and source of ignition on bleed line. 70
☒	☐	☐	62. Stabbing valves, cross overs, available. 109(b)
☒	☐	☐	63. All flow lines, choke and kill lines properly installed and secured. 111
☒	☐	☐	64. No valves downstream of the manifold. 112(2)
☒	☐	☐	65. Flare pit and flare line adequate and at required distance from well. 112((3)(a)&(4)(d))
☒	☐	☐	66. Trip sheets fully filled out. Flow checks conducted when required. 123(d)
☒	☐	☐	67. Hole fill volumes available to driller, hole is filled every fifth stand. 124(3)
☒	☐	☐	68. PVT system works properly. 123(a)(i)
☒	☐	☐	69. Any threaded outlets on the BOP stack? 30(1) - API RP53.2.c.7
☒	☐	☐	70. Pump pop off valves have proper shear pins and pressure setting, pump bleed off lines are secure, should vent to the suction tank. 13(1)(a)
☒	☐	☐	71. Degasser meets requirements. 13(1)(a), 30(1), 75(1)(d)
☒	☐	☐	72. Mud volume, flow, and combustible gas alarm systems functional. 42, 75(3), 131(1)(a)
☒	☐	☐	73. Crew properly trained and capable of operating BOP equipment. 147(b), 150(1)(a)
CAMP SAFETY*			
☒	☐	☐	74. At least four approved breathing devices are readily available in employee sleeping quarters, check condition and % full. OGOSHR 13.7(5)
☒	☐	☐	75. Fire and gas detectors installed and operable. 131(1)(a), OGOSHR 10.26(1) and Installations Regulations 31(5), 32((4)(a)&(4)(b)), 33(2)(a)(ii)
☒	☐	☐	76. Fire extinguishers installed and checked every month. 131(1)(a), OGOSHR 13.16, 13.17
☒	☐	☐	77. Fire alarm system operable. 131(a), OGOSHR 18.6 and Installations Regulations 31(6)
☒	☐	☐	78. Fire drills conducted. 151(a)
☒	☐	☐	79. Egress (shutters should be open). OGOSHR 18.3(1)
☒	☐	☐	80. General cleanliness. OGOSHR 10.2(1)
☒	☐	☐	81. Potable water available. OGOSHR 10.19
☒	☐	☐	82. Accommodations meet requirements. OGOSHR 10.25, 10.26, 10.27

FRENCH TRANSLATION VERSION AVAILABLE UPON REQUEST ONLY - LA TRADUCTION FRANÇAISE DISPONIBLE SUR DEMANDE SEULEMENT

*Unless otherwise stated, all quoted regulations refer to the Canada Oil & Gas Drilling Regulations (OGDR)

Other Legislations: OGOSHR, Oil & Gas Occupational Safety and Health Regulations CLC, Canada Labour Code - Part II

NOTICE OF PROBABLE NON-COMPLIANCE

Action Required:

No action Required at this time. Rig was in very operational order. Housekeeping very good and all equipment in good shape.

Keep up the good work.

I, the undersigned company representative or employee, hereby:

1. Declare that I have read pages 1 and 2 of this document and understand what action is required;
2. Agree to take such action and to have it completed on or before the completion date(s) indicated above; and
3. Agree to inform, by facsimile, the Safety/Conservation Officer of the National Energy Board named below, within fourteen (14) days from the above completion date, that remedial action has been taken.

For the above company:

(please print)

(signature)

Received by: Safety/Conservation Officer

Address: 444-7th Avenue S.W. Calgary, AB T2P 0X8

Telephone: (403) 299-4800

Facsimile: (403) 292-5876

Signature:

Title:

Date:

White - File

Pink - Company Representative

Yellow - Inspector

Goldenrod - Contractor Representative

WEEKLY SAFETY CHECK LIST

Location: AUBURN COLLEGE TRAINING WEL INDIAN G-53 Rig #: AKITA Rig 15

(= Satisfactory

X = Not Satisfactory

N/A = Not Applicable

Rig Floor

- 1.1 N/A condition of cathead and guards satisfactory
- 1.2 N/A condition of catlines satisfactory
- 1.3 S condition of tuggerlines satisfactory
- 1.4 S kelly hose safety chained
- 1.5 S condition of tongs, dies, lines, & clamps satisfactory
- 1.6 S counter weights snubbed and safe
- 1.7 S stabbing valve available
- 1.8 S driller's controls properly identified & protected
- 1.9 S drawworks brakes adjusted properly
- 1.10 S brake linkage okay
- 1.11 S drilling line in good condition
- 1.12 S crown stopper in place and properly adjusted
- 1.13 S when tripping - pipe is backed and secured in derrick drainage supplied (bird bath)
- 1.14 S weight indicator is secured
- 1.15 S brake handle hold down cannot be dislodged and is used
- 1.16 S tongs are secured when not in use
- 1.17 S floor visibility is satisfactory
- 1.18 S rotary table is not used for breaking out or making up pipe (two tongs are used)
- 1.19 S at least 3 exits from rig floor and doors open outwards
- 1.20 S rig is not drilling deeper than it's rated capacity
- 1.21 N/A driller is protected by headache post
- 1.22 S any structural changes approved by a P. Eng.
- 1.23 S slips and slip dies are in good condition
- 1.24 S non-skid surface or material provided for rig floor
- 1.25 S general housekeeping

Engines

- 2.1 S engine kills okay
- 2.2 S exhaust systems okay
- 2.3 S guards in place and secure
- 2.4 X oil leaks corrected
- 2.5 Sx general housekeeping

Personal Protective Equipment

- 3.1 S approved hard hats being used
- 3.2 S proper foot protection
- 3.3 S proper clothing being worn
- 3.4 S loose clothing, jewelry, long hair secured so cannot be caught up in machinery
- 3.5 S goggles at grinder and mud mixing station
- 3.6 S hearing protection available
- 3.7 S climb assist available for derrickman and being used
- 3.8 S safety belts available and number 3
- 3.9 S breathing apparatus okay and checked, number 10
- 3.10 S all personnel clean shaven

Substructure and Derrick

- 4.1 S safety pins in place
- 4.2 S braces and girders secure
- 4.3 S derrick ladders secure and proper
- 4.4 S escape lines and buggy okay
- 4.5 S monkey board area okay
- 4.6 S crown block area okay
- 4.7 S travelling block and hook okay
- 4.8 S proper safety measures taken when working above rig floor
- 4.9 NA stabbing board of approved type
- 4.10 S wind direction indicator provided
- 4.11 S derrick raised and lowered by competent person
- 4.12 S visual inspection of derrick before raising and recorded
- 4.13 S all lines properly flagged

BOP's and Cellar

- 5.1 all BOP equipment properly connected and working
- 5.2 all lines properly staked down
- 5.3 NA all equipment adequately heated
- 5.4 BOP controls all okay
- 5.5 S cellar has adequate vents
- 5.6 drillstring pressure gauge located at choke
- 5.7 accumulator precharge minimum pressure okay kpa
- 5.8 nitrogen bottles minimum pressure okay kpa
- 5.9 S nitrogen bottles stored properly and secured for transport
- 5.10 BOP ram size and pressure rating okay
- 5.11 bleed-off and kill lines okay
- 5.12 non-steel lines fire sheathed
- 5.13 general housekeeping

Light Plant

- 6.1 S system properly grounded
- 6.2 receptacles and plugs okay
- 6.3 wiring in good condition
- 6.4 bulbs and globes okay
- 6.5 lighting adequate in all areas
- 6.6 no clothes hung up for drying
- 6.7 general housekeeping

Mud Pump Area

- 7.1 lines all secure
- 7.2 pop valve pin correct size
- 7.3 S pop valve cover in place
- 7.4 shock hoses safety chained
- 7.5 guards in place
- 7.6 general housekeeping

Mud Tank Area

- 8.1 S shale shakers okay
- 8.2 S degasser okay
- 8.3 S all fittings secure
- 8.4 S mud mixing equipment okay
- 8.5 S ventilation adequate
- 8.6 mud cleaning equipment okay
- 8.7 S mud tank flooring and guarding in good condition
- 8.8 S at least two exits with doors opening outwards
- 8.9 S eye protection and eyewash available
- 8.10 S general housekeeping

Boiler

- 9.1 N/A water lines okay
- 9.2 N/A fuel lines okay
- 9.3 steam lines and fittings okay
- 9.4 sight glass guard okay
- 9.5 controls okay
- 9.6 wiring okay
- 9.7 no steam leaks
- 9.8 no steam hoses left on ground to develop hot holes
- 9.9 all sprockets guarded
- 9.10 general housekeeping

Floors, Stairs, and Handrails

- 10.1 S floors clear and clean
- 10.2 S railings and toeboards all in place
- 10.3 S stairs level, clear, clean, and secure
- 10.4 S stairs at end of catwalk

Safety Equipment and Warning Signs

- 11.1 S first aid kit stocked
- 11.2 S eye wash stations okay
- 11.3 S fire extinguishers available and checked
- 11.4 S stretcher available
- 11.5 S hydrogen sulphide gas detecting equipment available and working
- 11.6 S hydrogen sulphide warning signs in place
- 11.7 S no smoking signs in place
- 11.8 S high voltage signs in place
- 11.9 S noise hazard signs in place
- 11.10 chemical hazard signs in place
- 11.11 S automatic equipment signs in place
- 11.12 S fire extinguisher signs in place
- 11.13 S required dangerous and hazardous goods signs in place
- 11.14 S personnel with valid first aid certificate available
- 11.15 safety regulations posted

Pipe Rack Area

- 12.1 S pipe racks level with catwalk and secure
- 12.2 S end pins in place
- 12.3 S pipe rack transfer in place and secure

Lease

- 13.1 well to flame type equipment 25 metres
- 13.2 S well to site shacks 25 metres
- 13.3 well to end of flare line 50 metres
- 13.4 N/A well to rubbish burn pile 50 metres
- 13.5 S suitable lease roads and clear access
- 13.6 S fluids properly contained
- 13.7 S general housekeeping

Tool House

- 14.1 guards and rests in place on grinder
- 14.2 guards in place on air compressor
- 14.3 general housekeeping

Change House

- 15.1 S storage of oily rags satisfactory
- 15.2 S general housekeeping

Records (to be Recorded in Tour Book)

- 16.1 S weekly safety meetings
- 16.2 S BOP drills
- 16.3 S accidents and/or incidents
- 16.4 S daily BOP function tests
- 16.5 S safety inspections
- 16.6 S drilling line ton miles and slip and cut records
- 16.7 S weekly motor shut-off tests
- 16.8 S weekly brake inspections
- 16.9 S BOP tickets posted
- 16.10 S trip sheets being filled out
- 16.11 S licence posted

Wellsite Trailers

- 17.1 S smoke detectors okay
- 17.2 S fire extinguishers okay
- 17.3 S furnace and water heater checked
- 17.4 NA chimney extensions in place
- 17.5 NA propane lines and metal cladding grounded
- 17.6 NA proper regulators on propane system
- 17.7 S electrical system okay

Prior to Spudding

- 18.1 S All guards, platforms, stairs, handrails, guardrails, and escape line are in place before spudding

Miscellaneous

- 19.1 S incinerator checked
- 19.2 S PVT system in place and operating
- 19.3 S trip tank and gauges okay
- 19.4 S adequate mud supplies
- 19.5 S hazardous chemicals inventoried
- 19.6 X no liquid fuel within 20 metres of wellbore
- 19.7 NA tanks or pits circulating flammable material protected from ignition source
- 19.8 NA if a trailer is used as a pipe rack it must be constructed so that pipe being hoisted will not roll off trailer
- 19.9 S hoisting tubulars (pipe, drill collars, casing) from catwalk only one joint at a time
- 19.10 S drill stem testing, swabbing, cementing, and well servicing. cars and trucks must be 25 metres away from wellbore. swivel joints are secured and testing for hydrogen sulphide is done.

Camp

- 20.1 S fire extinguishers okay and accessible
- 20.2 S fire alarms working
- 20.3 S smoke and heat detectors okay
- 20.4 S furnace rooms unobstructed
- 20.5 S camp clean and tidy
- 20.6 S light plant grounded
- 20.7 S garbage disposal adequate
- 20.8 S weekly fire drills being conducted

Action Taken on Deficiencies

Deficiency
Code
Number

19.6

Date

July 31/01

Action Taken

FUEL tank FOR Rig is PART OF
COMBINATION BUILDING

Rig Check By:

S PODULSKY, M LYLE

Date: July 30/01

Log Strip

(Page 1)

Aurora College # AL

AKita IS

Well # G-53

Drilled: 02/08/2001 - 03/08/2001

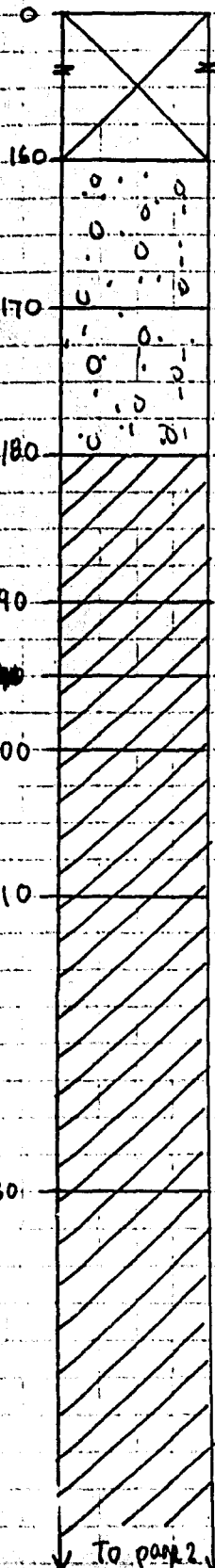
Location: Inuvik

Sampling: 5m

Sieving at 180 μ m

Sizing is average

Depth (m)



Not Recovered

Loose pebbles (50%) in fine sand (250-350 μ m).
Pebbles are 5 mm in size and subrounded.

Loose pebbles (20%) in fine sand (250-350 μ m).
Pebbles are 1-2 mm in size and subrounded.

Silty mudstone (dark gray), subangular, 1-2 mm in size.

Silty mudstone (dark gray), Angular, 5-10 mm in size.

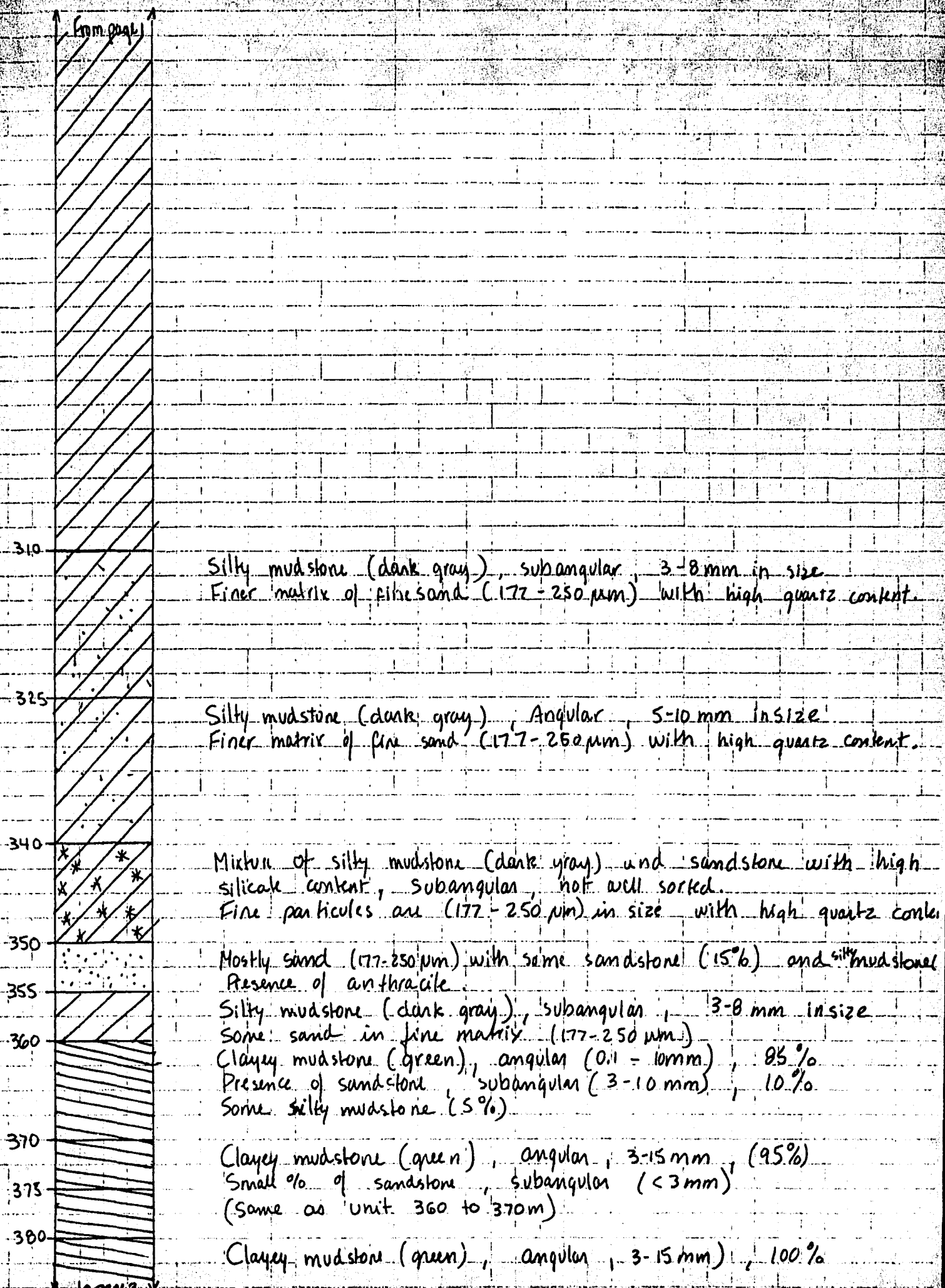
Silty mudstone (dark gray), subangular, 350-500 μ m in size.

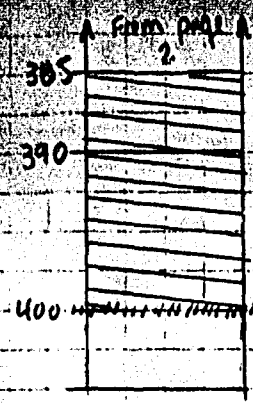
Silty mudstone (dark gray), subangular, 4-8 mm in size.

Silty mudstone (dark gray), subangular, 5-20 mm.

Silty mudstone (dark gray), subrounded, 3-8 mm.

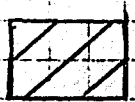
To page 2



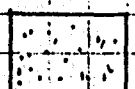


Clayey mudstone (different mineral composition), angular, (3-15 mm), 100%
Clayey mudstone (green), angular, (2-15 mm), 100%

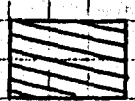
Legend



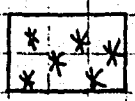
Silty mudstone



Sand



Clayey mudstone



Sandstone

Accompanying :
• 2 box of raw sampled (canned)
• 1 box of bagged dry sample

For Information called:

Caroline Duchesne
Geological Survey of Canada
613-995-7628
CDUCHESN @ NRCan.GC.CA

**TENTATIVE
WELLSITE
PLAN**

OVERSIZED

DOCUMENT

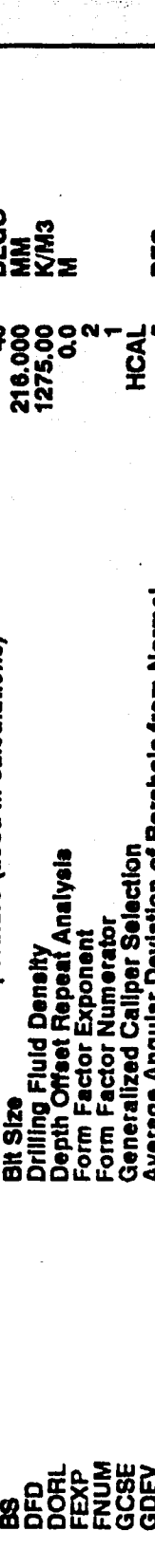
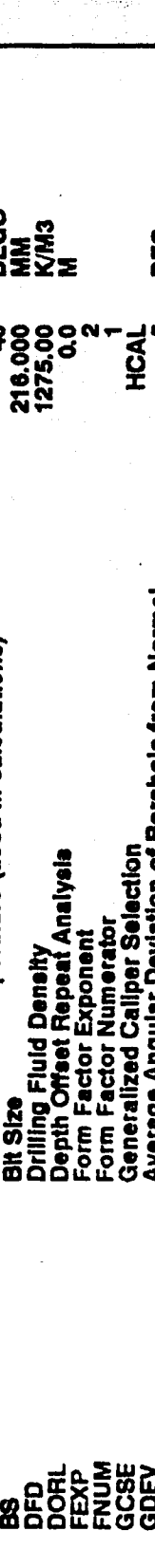
FILMED

ON

35mm

**RESISTIVITY/
CONDUCTIVITY**

Input DLIS Files			
DEFAULT	HILTD.014	FN:13 PRODUCER	03-Aug-2001 17:36
			400.5 M
			12.2 M
OP System Version: 9C1-303			
MCM			
HILTB-FTB	OP91-4p2	DTC-H	OP91-4p2
PIP SUMMARY			
Time Mark Every 60 S			
120	SP [5+ mV] (SP) 30		
25	HILT Calliper (HCAL) 150		
	Gamma Ray (GR) (GAPI) 150		
25	Bit Size (BS) 375		
	Tension (TENS) (N) 5000		
	Stuck Stretch (STT) (M) 20		
	AIT-H 90 Inch Investigation (AHF90) (OHMM) 50		
	AIT-H 20 Inch Investigation (AHF20) (OHMM) 50		
	AIT-H 90 Inch Investigation Conductivity (AHFCO90) (MM/M) 0		
MAIN PASS - PLATON EXPRESS - ARRAY INDUCTION ***			



	(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)
1	1.014			0.8753		
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.015			-0.1942		
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
3	1.012			0.09355		
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
4	0.9925			-0.1241		
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
5	0.9871			-0.1758		
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
6	0.9976			0.2335		
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
7	1.008			0.9804		
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)

Master: 19 JUL-2001 16:09

High resolution Integrated Logging Tool-DTS Master Calibration						
Sonde Error Correction						
Idx	Value	R Sonde Error Correction MM/M	Value	X Sonde Error Correction MM/M		
0	-83.65		10.66			
	-231.0 (Minimum)	-58.00 (Nominal)	119.0 (Maximum)	-2250 (Minimum)	0 (Nominal)	2250 (Maximum)
1	133.2		-127.3			
	114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)	-625.0 (Minimum)	0 (Nominal)	625.0 (Maximum)
2	116.4		-25.30			
	66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)	-350.0 (Minimum)	0 (Nominal)	350.0 (Maximum)
3	62.12		53.35			
	39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)	-250.0 (Minimum)	0 (Nominal)	250.0 (Maximum)
4	24.77		-18.67			
	15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)	-63.00 (Minimum)	0 (Nominal)	63.00 (Maximum)
5	11.57		20.82			
	4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)	-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
6	9.310		2.653			
	5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
7	0.0065224		2.841			
	-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)

Master: 19 JUL-2001 16:09

High resolution Integrated Logging Tool-DTS Master Calibration						
Mud Gain Correction						
Idx	Value	Coarse - Mag. Real, Imag	Value	Fine - Mag. Real, Imag		
0	0.9956		0.9986			
	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	0.9956		0.9986			
	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	0.9956		0.9986			
	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Master: 19 JUL-2001 16:09

High resolution Integrated Logging Tool-DTS Master Calibration					
Inversion results					
Phase	Rho Aluminum K/M3	Value	Phase	Rho Magnesium K/M3	Value
Master		2586	Master		1689
	2586 (Minimum)	2598 (Nominal)		1678 (Minimum)	1698 (Nominal)
		2608 (Maximum)			1698 (Maximum)
Phase	Pi Aluminum	Value	Phase	Pi Magnesium	Value
Master		2.597	Master		2.611
	2.470 (Minimum)	2.570 (Nominal)		2.550 (Minimum)	2.650 (Nominal)
		2.670 (Maximum)			2.750 (Maximum)

Master: 23 JUL-2001 18:07

High resolution Integrated Logging Tool-DTS Master Calibration							
Deviation Summary							
Phase	BS Average Deviation %	Value	Phase	SS Average Deviation %	Value	Phase	LS Average Deviation %
Master		0.3883	Master		0.1431	Master	
	-0.5000 (Minimum)	0 (Nominal)		-1.000 (Minimum)	0 (Nominal)		-1.500 (Minimum)
		0.5000 (Maximum)			1.000 (Maximum)		
Phase	BS Max Deviation %	Value	Phase	SS Max Deviation %	Value	Phase	LS Max Deviation %
Master		1.057	Master		0.6480	Master	
	-1.600 (Minimum)	0 (Nominal)		-2.500 (Minimum)	0 (Nominal)		-3.500 (Minimum)
		1.600 (Maximum)			2.500 (Maximum)		

Master: 23 JUL-2001 18:07

High resolution Integrated Logging Tool-DTS Master Calibration							
Tank Measurement							
Phase	Thermal Log. Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CTC (Tank)
Master		2362	Master		2362	Master	
	5000 (Minimum)	6000 (Nominal)		2075 (Minimum)	2783 (Nominal)		2.120 (Minimum)
		7200 (Maximum)			3125 (Maximum)		
							2.159 (Nominal)
							2.540 (Maximum)

Master: 20 JUN-2001 14:09

COMPANY **AURORA COLLEGE, INUVIK**

WELL **AURORA TRAINING WELL INUVIK G-53**

FIELD **UNDEFINED**

PROVINCE **NWT**

BOTTOM LOG INTERVAL 397 m

SCHLUMBERGER DEPTH 399.5 m

DEPTH DRILLER 401 m

KELLY BUSHING 22.605 m

DRILL FLOOR 22.305 m

GROUND LEVEL 17.905 m

Schlumberger

PLATFORM EXPRESS
ARRAY INDUCTION-SP

DENSITY

COMPANY: AURORA COLLEGE, INUVIK

WELL: AURORA TRAINING WELL INUVIK G-53

FIELD: UNDEFINED

PROVINCE: NWT

PROVINCE/NWT Location: UNDEFINED Field: LAT - 68 DEG 22'28.04" Well: AURORA TRAINING WELL INUVIK Company: AURORA COLLEGE, INUVIK	LOCATION			PLATFORM EXPRESS COMPENSATED NEUTRON LITHO DENSITY	
		LAT: 68 DEG 22'28.04" LONG: 131 DEG 43'08.47" UWI: 300336830133300		Bev.: K.B. 22.605 m G.L. 17.905 m D.F. 22.305 m	
		Permanent Datum: GROUND LEVEL Log Measured From: KELLY BUSHING Drilling Measured From: KELLY BUSHING		Bev.: 17.905 m 470 m above Perm Datum	
AF Serial No. VID: 1915		UNIT: G		SECTION: 53	
				AREA: INUVIK	

Logging Date	3-AUG-2001	
Run Number	ONE	
Depth Driller	401 m	
Schlumberger Depth	399.5 m	
Bottom Log Interval	394 m	
Top Log Interval	15 m	
Casing Driller Size @ Depth	244.500 mm	150 m
Casing Schlumberger	153.5 m	
Bit Size	216.000 mm	
Type Fluid In Hole	GEL-CHRM	
Density	1275 kg/m ³	150 m
Fluid Viscosity	9.5 cP	150 m
Flowline	FLOWLINE	
RM 100 Meters Temperature	0.220 cP/m	150 m
RM 100 Meters Temperature	0.125 cP/m	150 m
RM 100 Meters Temperature	0.110 cP/m	150 m
Source RM	PREPROD	150 m
RM 100 Meters Temperature	0.100 cP/m	150 m
Maximum Bottom Temperature	40 degC	150 m
Correlation Started	3-AUG-2001	14:00
Logger On Bottom	3-AUG-2001	16:20
Unit Number	2025 - NISKU	
Recorded By	BART DOYLE	
Witnessed By	LORNE HAMMER	

	Logging Date				
	Run Number				
	Depth Driller				
	Schlumberger Depth				
	Bottom Log Interval				
	Top Log Interval				
	Casing ID/Inner Size (in) Depth				
	Casing Schlumberger				
	Bit Size				
	Type Fluid In Hole				
	Density				
	Viscosity				
	Fluid Loss				
	Source of Sample				
	RM (in) Measured Temperature				
	RMF (in) Measured Temperature				
	RMIC (in) Measured Temperature				
	Source RMF				
	RM (in) MB1				
	RMF (in) MB1				
	Maximum Recorded Temperature				
	Circulation Stopped				
	Time				
	Logger On Bottom				
	Time				
	Unit Number				
	Location				
	Recorded By				
	Witnessed By				

[illegible]

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OTHER SERVICES1	OTHER SERVICES2
OS1: PLATFORM EXPANSION	OS1:
OS2: ARRAY INJECTION/SP	OS2:
OS3: COMPUTATIONAL EXPANSION	OS3:
OS4: I/O EXPANSION	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 2
REMARKS: RUN NUMBER 1 ALL TOOLS RUN AS PER CLIENT REQUEST AS SHOWN IN TOOL SKETCH INDUCTIVE SURFING AND THERMAL RUN IN COMBINATION CEMENT VOLUME 13.50 M3 INCLUDING FLAT FORM EXPRESS CALIPER (HCA) BASE DIAL CALIPER CASING DIAMETER (ICD) OF 78mm 24mm WITH SAND CEMENTED IN 2 1/2" HOLE SPOOFED FOR WAYS TO PREVENT WRAPPING TELEVISION RUN IN 2 1/2" HOLE WHILE RUNNING IN HOLE TO IMPROVE ACCURACY NEED TO BE RUN IN 2 1/2" HOLE TO PREVENT WRAPPING HICAL CALIPER 4" CALIPER TO BE USED FOR CASING ID TOOL HEAD APPROX. 6" LONG AND CHANGE IN PAD ORIENTATION GRAND NUTATION: ICD D BY DEPTH = 15m
CONTRACTOR: AKA & SON FIG NAME: AKA # 15, FIG. NUMBER: 9311-A72-1-1 CREW WAS FIELD ENGINEER: BART DOYLE AND FIELD TECHNICIAN: PETER POOS THANK YOU FOR YOUR SUPPORT AND INTEREST IN OUR FIELD SERVICES

[illegible]

EQUIPMENT DESCRIPTION	
RUN 1	RUN 2
SURFACE EQUIPMENT	

GSR.F 1904 NCT.B CNR.AB NCS.VR 1907	WITH DTS; A 367 WTM	DOWNHOLE EQUIPMENT
--	------------------------	--------------------

LEH-QT	LEH-QT 209C
13.28	

DTC-H			
ECH-KC 9289			
DTC-HA 8216			
DTC-HA 8217			
	CTEM		
		12 11	12.39
		11 48	
	TESTSUS		
	UNSAFE		
	RECEIVED		

	W/C/A	Com. copy
HILTB-FTB	11:48	11:48
HGNSO-R-86:	11:25	
HMCA		
HGNS-11-851		
NLS-X-1021		
NSM-1-86		
HAC-2		

HONI		
HGR-864		
HRCB 1718		
HMS B 992	Nelson F.	9.47
HQD 728	Martin V	--
HPR-1000		9.32
HSC-2400		
HILT Nici L S		
HILT Nici SS		
I-CNS sons		R 61

[illegible]

MOBILE
5.88
5.59

24 MM Standoff

[illegible]

**WALLS OF THE TUNNEL ARE MADE FROM POLYETHYLENE
AND ARE ONLY ONE INCH THICK. THEY ARE NOT
STRONG ENOUGH TO HOLD UP THE ROOF.
THEY ARE ONLY THERE TO KEEP THE WATER OUT.**

Input DLIS Files			
DEFAULT	FILED 014	FN:13 PRODUCER	03-Aug-2001 17:36
		400.5 M	12.2 M

OP System Version: 9C1-303	
MCM	
MTLTD-170	OP91-KPZ
DTC-11	OP91-KPZ
PIP SUMMARY	

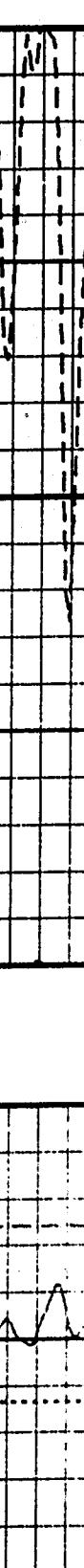
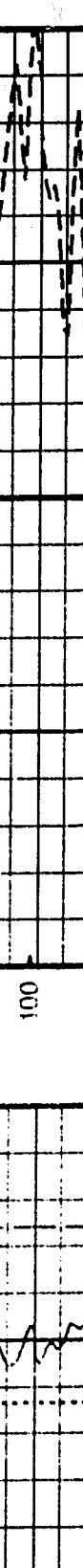
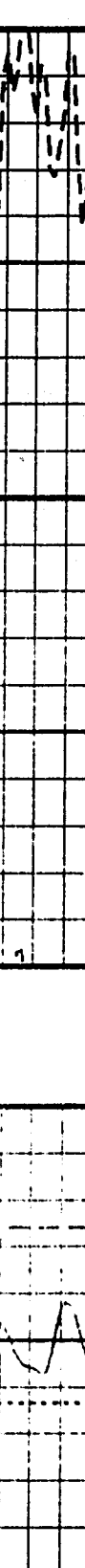
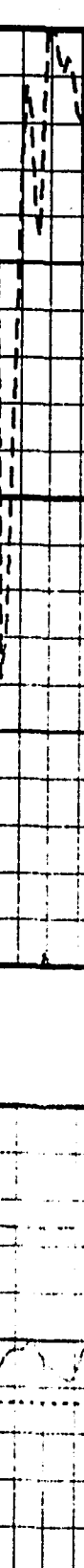
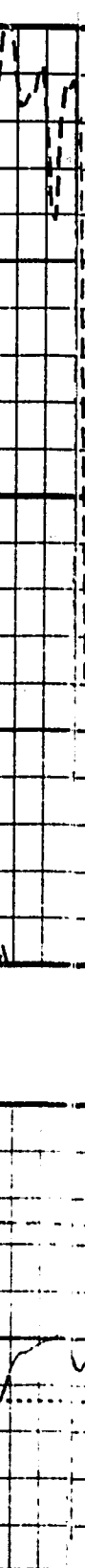
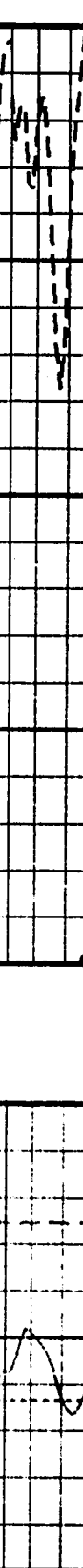
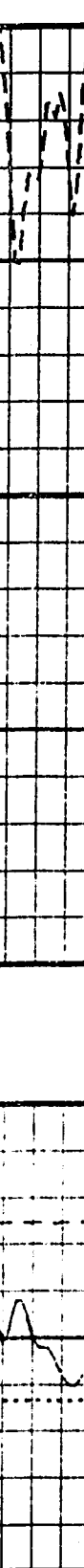
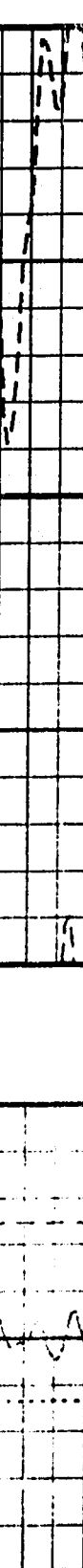
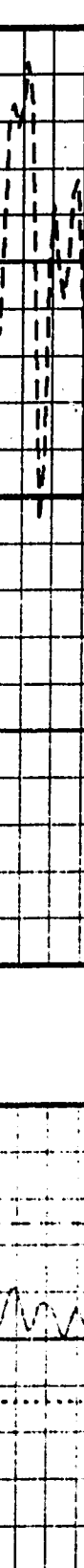
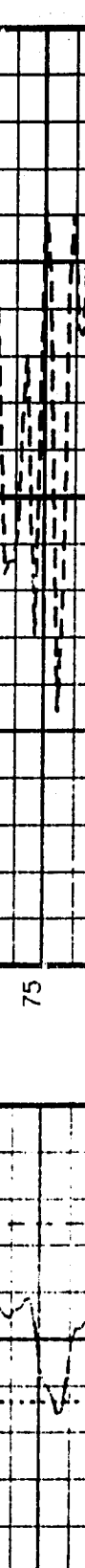
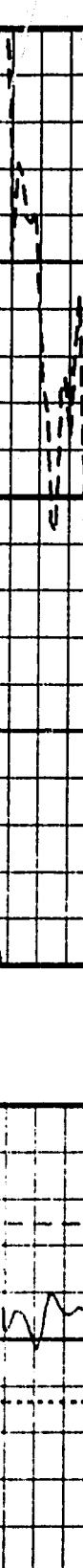
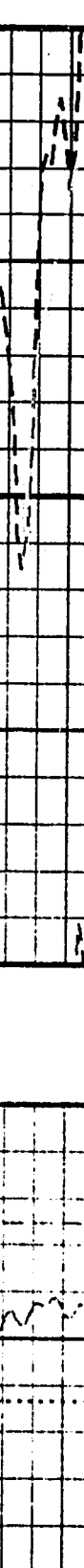
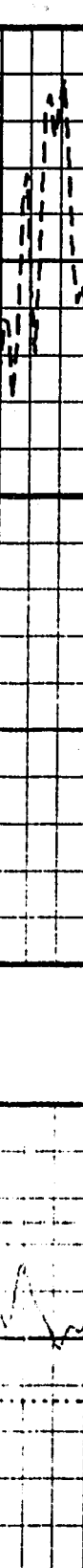
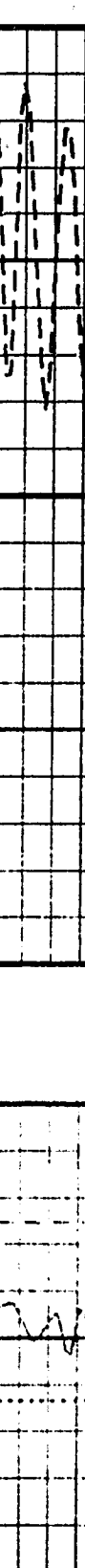
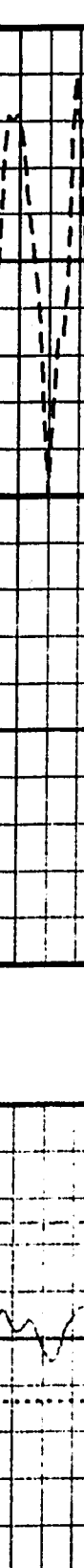
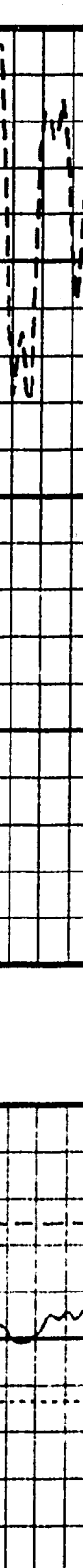
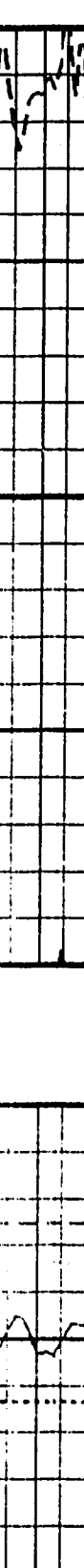
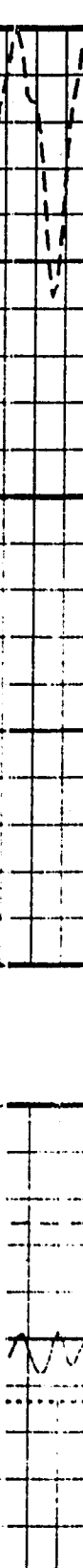
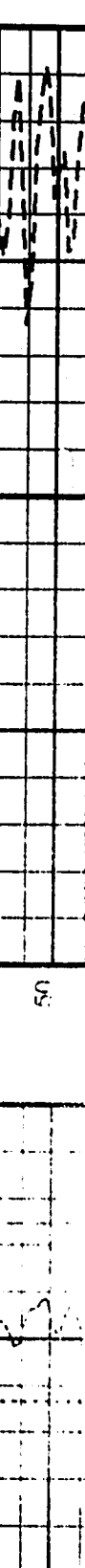
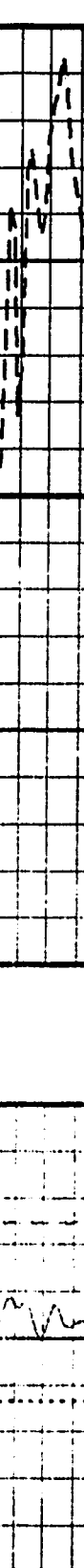
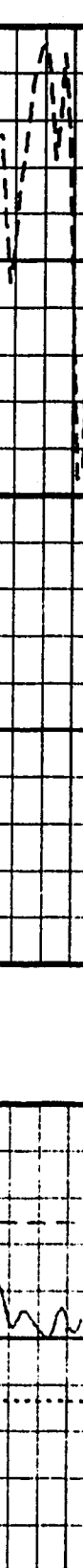
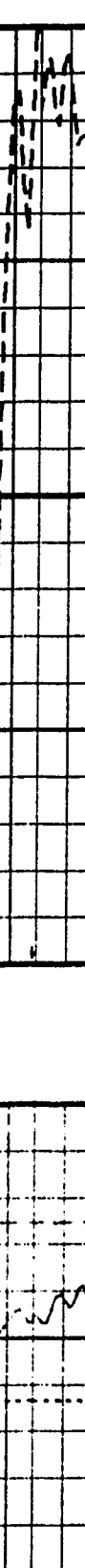
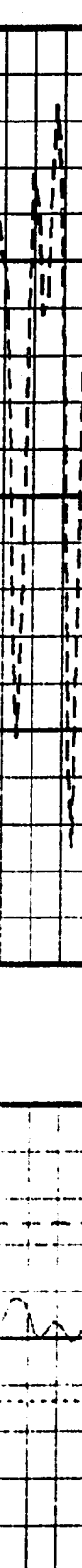
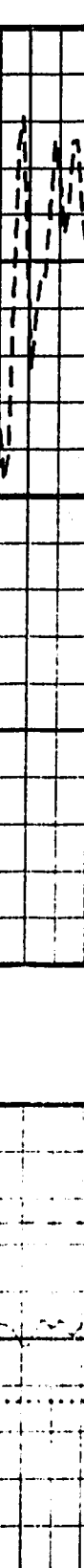
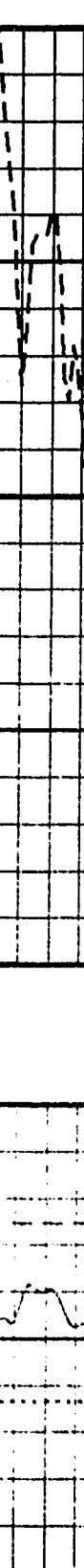
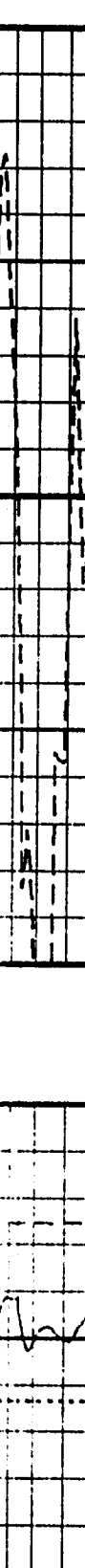
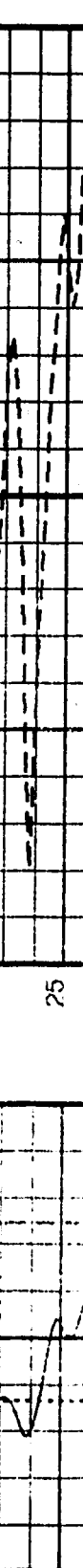
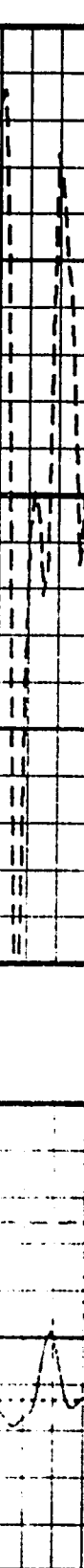
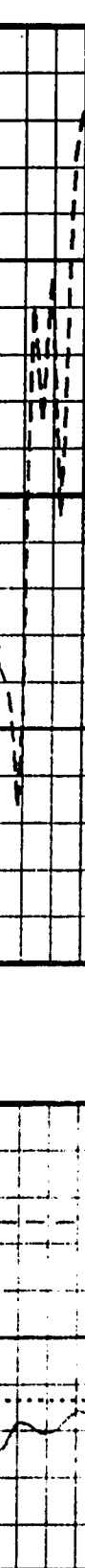
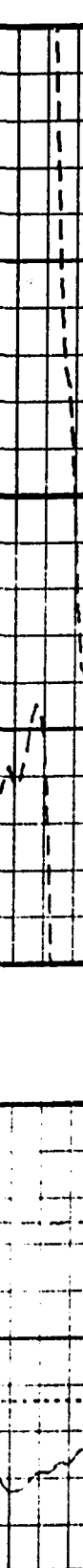
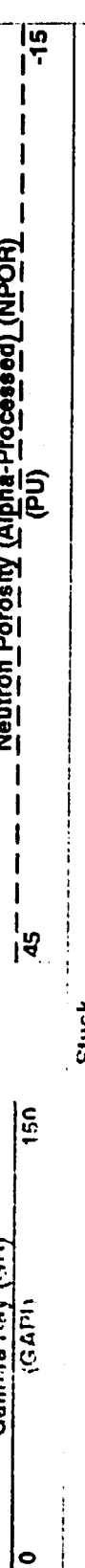
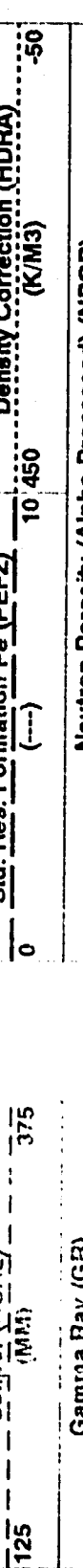
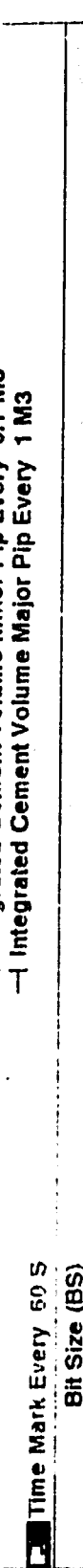
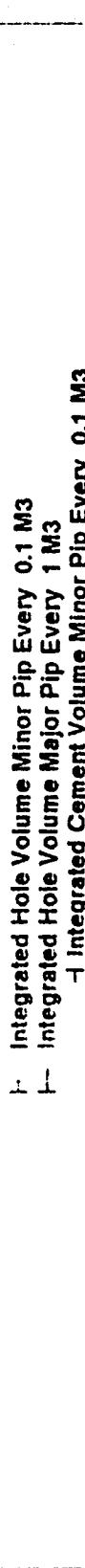
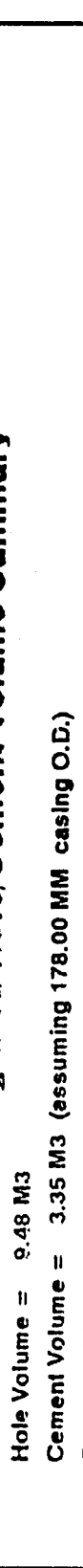
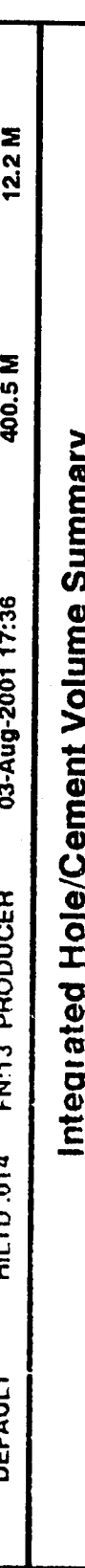
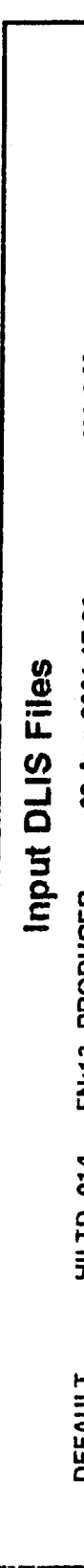
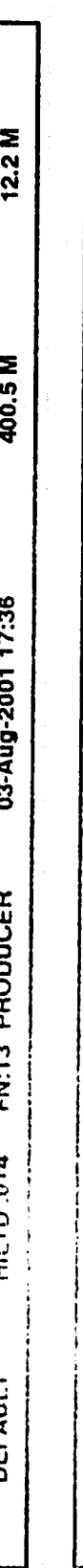
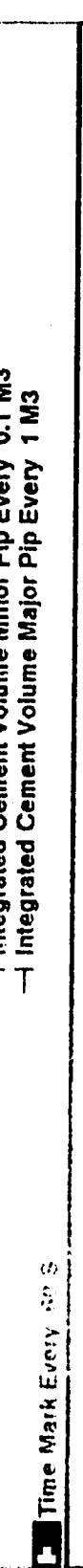
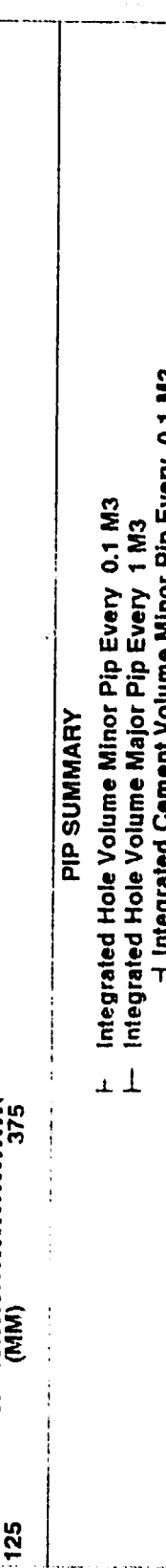
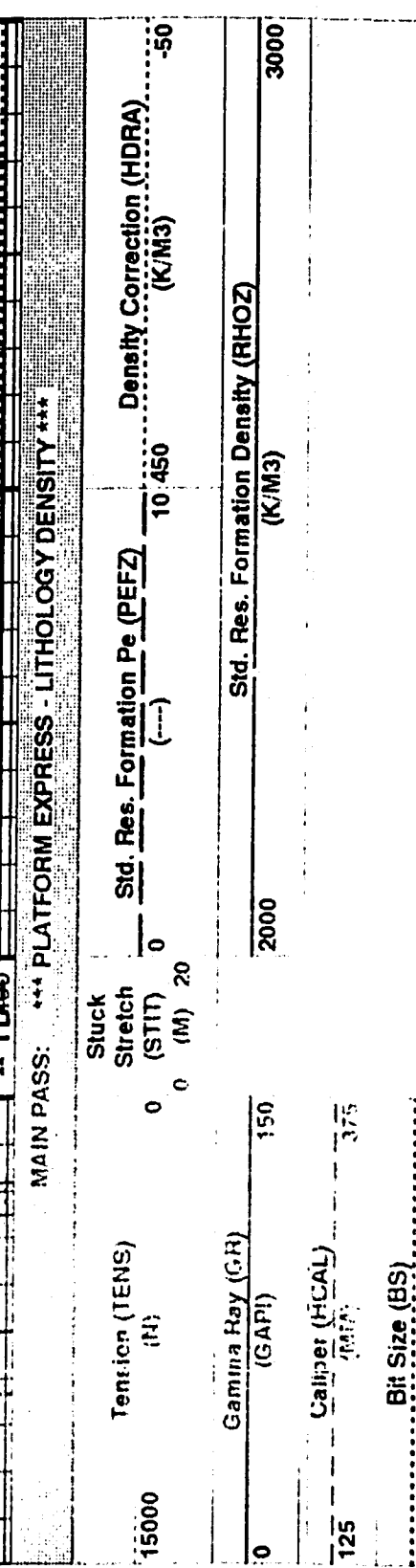
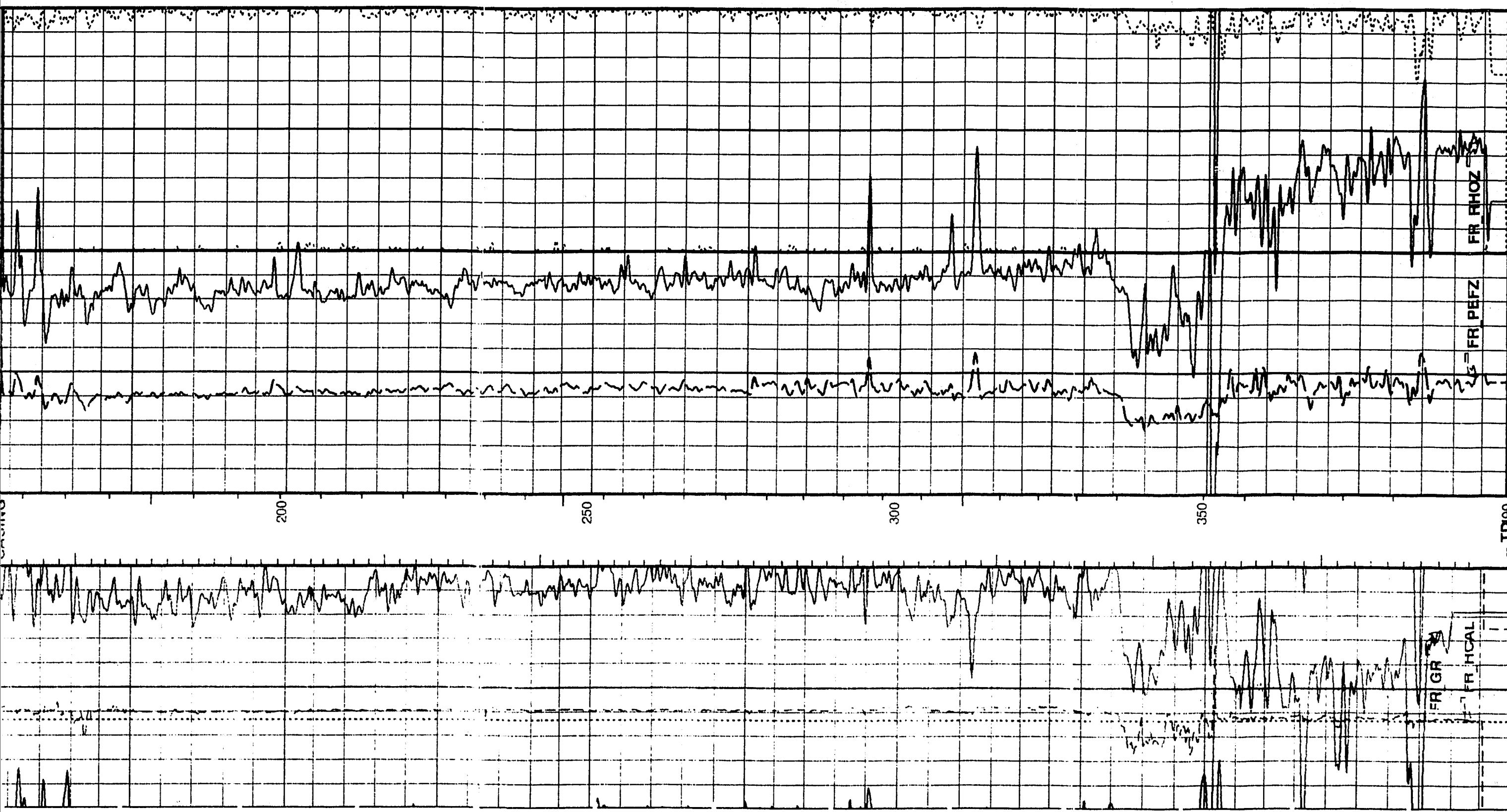
Time Mark Every 60 S
Rit Size (BS)
— Integrated Cement Volume Major Pip Every 1 M3
— Integrated Cement Volume Minor Pip Every 0.1 M3
— Integrated Hole Volume Major Pip Every 1 M3
— Integrated Hole Volume Minor Pip Every 0.1 M3

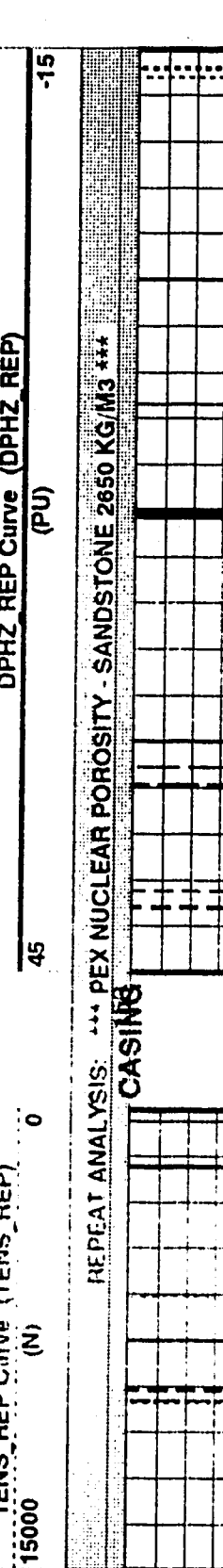
Caliper (HCAL)		Std. Res. Formation Density (RHOZ)
(MM)	(MM)	
125	375	50000
125	375	150
Gamma Ray (GRI)		
(G/IN)		

Tension (TFH)	Stretch	Std. Res. Formation Pe (PEFZ)	Density Correction (HDRA)
ϵ_1	(STIT)	(---)	(K/Mg)
0	0	0	-50
15000	0 (N)	20	10.450
			2000
			130

MAIN PASS: *** PLATFORM EXPRESS - LITHOLOGY DENSITY ***

CASING



[illegible]

MISCELLANEOUS

COMPANY AURORA COLLEGE INUVIK		AURORA TRAINING WELL INUVIK G-53		UNDEFINED	
PROVINCE NWT		Field: UNDEFINED		LAT: 68 DEG 22'28.04"	
Location: AURORA COLLEGE, INUVIK		Well: AURORA TRAINING WELL INUVIK		FLUID LEVEL: 0	
Company: AURORA COLLEGE, INUVIK		Location: AURORA COLLEGE, INUVIK		FLUID LEVEL: 0	
Schlumberger		TEMPERATURE LOG FROM SURFACE TO TD (DOWN LOG)			
LAT: 68 DEG 22'28.04"		Elev.: K.B. 22,605 m			
LONG: 133 DEG 43'06.47"		G.L. 17,905 m			
UWI: 300G536830133300		D.F. 22,305 m			
Permanent Datum: GROUND LEVEL		Elev.: 17,905 m			
Log Measured From: KELLY BUSHING		4.70 m above Perm. Datum			
Drilling Measured From: KELLY BUSHING					
API Serial No. WID: 1915		UNIT: G		SECTION: 53	
AREA: INUVIK					
Logging Date: 3-AUG-2001					
Run Number: ONE					
Depth Driller: 401 m					
Schlumberger Depth: 399.5 m					
Bottom Log Interval: 397 m					
Top Log Interval: 153.5 m					
Casing Driller Size @ Depth: 244.500 mm @ 150 m					
Casing Schlumberger: 153.5 m					
Bit Size: 216.000 mm					
Type Fluid In Hole: GEL-CHEM					
Density: 1275 kg/m3					
Fluid Loss: 9.5 cm3					
Source Of Sample: FLOWLINE					
RM @ Measured Temperature: 0.220 ohm.m @ 18 degC					
RMF @ Measured Temperature: 0.125 ohm.m @ 20 degC					
RMC @ Measured Temperature: 0.110 ohm.m @ 20 degC					
Source RMF: PRESSED					
RM @ MRT: 0.141 @ 40					
Maximum Recorded Temperature: 40 degC					
Circulation Stopped: 3-AUG-2001 14:00					
Logger On Bottom: 3-AUG-2001 16:20					
Unit Number: 2025					
Location: NISKU					
Recorded By: BART DOYLE					
Witnessed By: LORNE HAMMER					
Logging Date: 3-AUG-2001					
Run Number: ONE					
Depth Driller: 401 m					
Schlumberger Depth: 399.5 m					
Bottom Log Interval: 397 m					
Top Log Interval: 153.5 m					
Casing Driller Size @ Depth: 244.500 mm @ 150 m					
Casing Schlumberger: 153.5 m					
Bit Size: 216.000 mm					
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Source Of Sample: FLOWLINE					
RM @ Measured Temperature: 0.220 ohm.m @ 18 degC					
RMF @ Measured Temperature: 0.125 ohm.m @ 20 degC					
RMC @ Measured Temperature: 0.110 ohm.m @ 20 degC					
Source RMF: PRESSED					
RM @ MRT: 0.141 @ 40					
Maximum Recorded Temperature: 40 degC					
Circulation Stopped: 3-AUG-2001 14:00					
Logger On Bottom: 3-AUG-2001 16:20					
Unit Number: 2025					
Location: NISKU					
Recorded By: BART DOYLE					
Witnessed By: LORNE HAMMER					
Logging Date: 3-AUG-2001					
Run Number: ONE					
Depth Driller: 401 m					
Schlumberger Depth: 399.5 m					
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Top Log Interval: 153.5 m					
Casing Driller Size @ Depth: 244.500 mm @ 150 m					
Casing Schlumberger: 153.5 m					
Bit Size: 216.000 mm					
Type Fluid In Hole: GEL-CHEM					
Density: 1275 kg/m3					
Fluid Loss: 9.5 cm3					
Source Of Sample: FLOWLINE					
RM @ Measured Temperature: 0.220 ohm.m @ 18 degC					
RMF @ Measured Temperature: 0.125 ohm.m @ 20 degC					
RMC @ Measured Temperature: 0.110 ohm.m @ 20 degC					
Source RMF: PRESSED					
RM @ MRT: 0.141 @ 40					
Maximum Recorded Temperature: 40 degC					
Circulation Stopped: 3-AUG-2001 14:00					
Logger On Bottom: 3-AUG-2001 16:20					
Unit Number: 2025					
Location: NISKU					
Recorded By: BART DOYLE					
Witnessed By: LORNE HAMMER					
Logging Date: 3-AUG-2001					
Run Number: ONE					
Depth Driller: 401 m					
Schlumberger Depth: 399.5 m					
Bottom Log Interval: 397 m					
Top Log Interval: 153.5 m					
Casing Driller Size @ Depth: 244.500 mm @ 150 m					
Casing Schlumberger: 153.5 m					
Bit Size: 216.000 mm					
Type Fluid In Hole: GEL-CHEM					
Density: 1275 kg/m3					
Fluid Loss: 9.5 cm3					
Source Of Sample: FLOWLINE					
RM @ Measured Temperature: 0.220 ohm.m @ 18 degC					
RMF @ Measured Temperature: 0.125 ohm.m @ 20 degC					

TEMPERATURE LOG FROM SURFACE TO TD (DOWN LOG)

17.905 m	GROUND LEVEL
22.305 m	DRIILL FLOOR
22.605 m	KELLY BUSHING
401 m	DEPTH DRILLER
399.5 m	SCHLUMBERGER DEPTH
397 m	TVAINT LOG INTERVAL

WLN PROVINCE
UN FIELD
WELL
AURORA TRAINING WELL
UNDEFINED
KIAUKIAU
AURORA COLLEGE, KIAUKIAU
AURORA

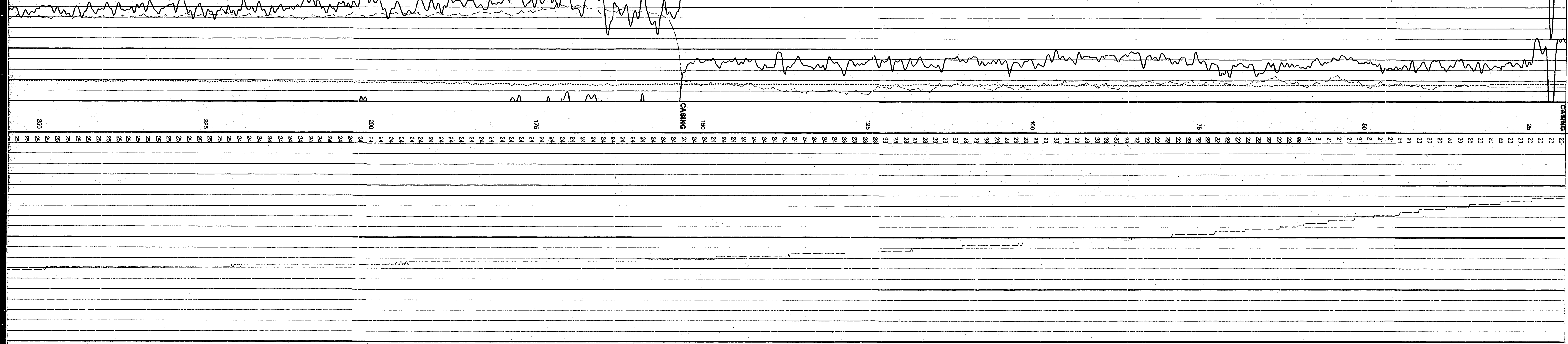
DEFAULT	HILL TD: 011	FN: 10 PRODUCER	03-Aug-2001 16:20	20.1 M	385.7 M
Input DLS Files					
Op System Version: 9C1-303					
HILL TD: FTB	OP91-KP2	DTC-H	OP91-KP2		
Format: TEMPERATURE	Vertical Scale: 1:240	Graphics File Created: 03-Aug-2001 16:18			

DLS Name	Description	Parameters	Value
BHT	Bottom Hole Temperature (used in calculations)		40 DEGC
DO	Depth Offset for Logical Unit 1		0.0 M
CODE	Geothermal Gradient		2 DC/M
OTRE	Generalized Temperature Selection		NO YES
HECH	HILL Speed Correction Mode		NO YES
HST	HILL Use HILL Acceleration		NO YES
SP	Surface Processing		NO YES
SHT	Surface Hole Temperature		NO YES
SPNV	SPNV Hole Temperature		NO YES
TD	SPNV Hole Temperature		NO YES
TEMPERATURE LOG FROM SURFACE TO TD (LOG DOWN FOR ACCURACY)			

From T1 to T3

15000	Tension (TENS)	0
0	Gamma Ray (GR)	150
120	SP (GP)	30
	(MW)	

15	General Temperature (GTEM)	30
	(DEGC)	



COMPANY: AURORA COLLEGE, INUVIK

WELL: AURORA TRAINING WELL INUVIK G-53

FIELD: UNDEFINED

PROVINCE: NWT

PROVINCE: NWT

Field: UNDEFINED

Location: LAT: 68 DEG 22'28.04" LONG: 133 DEG 43'08.47" UTM: 300G536830133300

Well: AURORA COLLEGE, INUVIK

Company: AURORA COLLEGE, INUVIK

Location: LAT: 68 DEG 22'28.04" LONG: 133 DEG 43'08.47" UTM: 300G536830133300

Permanent Datum: GROUND LEVEL

Log Measured From: KELLY BUSHING

Drilling Measured From: KELLY BUSHING

Elev.: K.B. 22,605 m

G.L. 17,905 m

D.F. 22,305 m

Elev.: 17,905 m

4.70 m above Perm. Datum

API Serial No. WID: 1915

UNIT: G

SECTION: 53

AREA: INUVIK

Logging Date: 3-AUG-2001

Run Number: ONE

Depth Driller: 401 m

Schlumberger Depth: 399.5 m

Bottom Log Interval: 387 m

Top Log Interval: 153.5 m

Casing Driller: 244,500 mm

Casing Schlumberger: 153.5 m

Bit Size: 218,000 mm

Type Fluid In Hole: GEL-CHEM

Density: 1275 kg/m³

Fluid Loss: 9.5 cm³

Source Of Sample: FLOWLINE

RM @ Measured Temperature: 0.220 ohm.m

RM @ Measured Temperature: 0.125 ohm.m

RM @ Measured Temperature: 0.110 ohm.m

Source RMC: NO SAMPLE

RM @ Measured Temperature: 0.140 ohm.m

RM @ Measured Temperature: 0.084 ohm.m

Maximum Recorded Temperature: 40 degC

Circulation Stopped: 3-AUG-2001 14:00

Logger On Bottom: 3-AUG-2001 16:20

Unit Number: 2025

Location: NISKU

Recorded By: BART DOYLE

Witnessed By: LORNE HAMMER

Logging Date: 3-AUG-2001

Run Number: ONE

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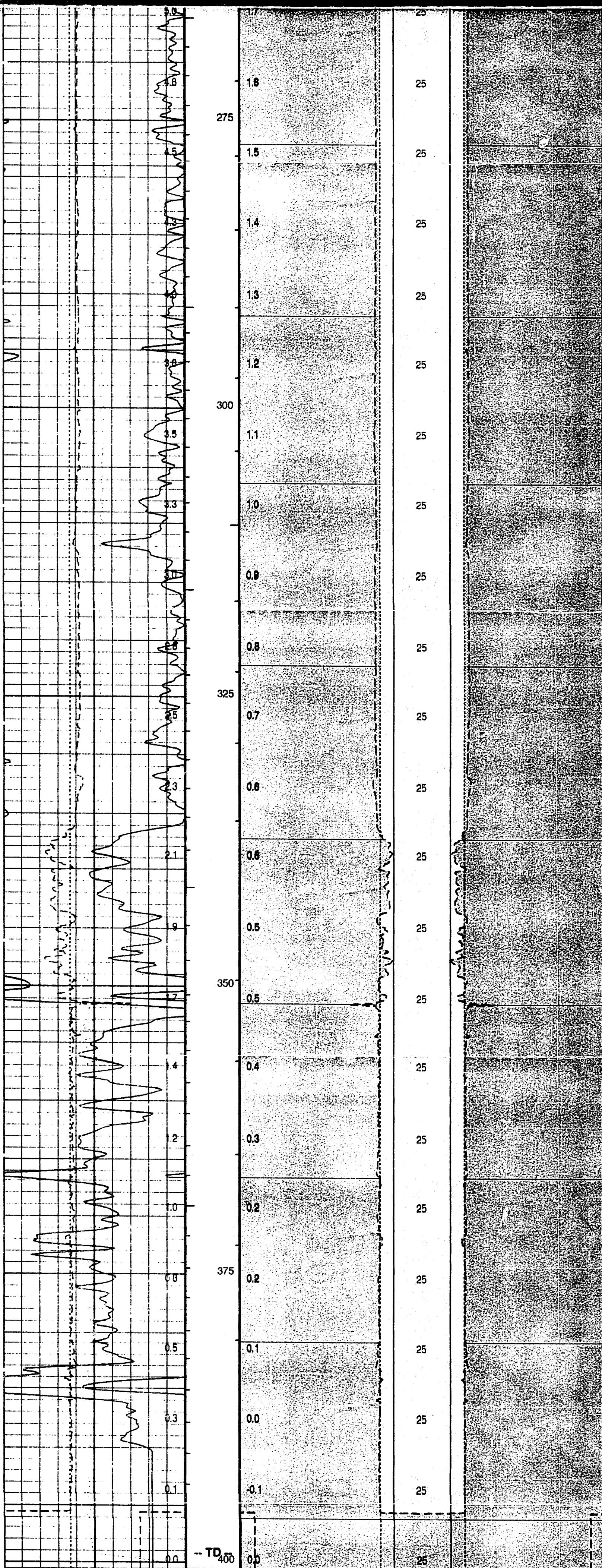
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RM @ Measured Temperature: 0.125 ohm.m

RM @ Measured Temperature



*** CEMENT VOLUME LOG ***

Tension (TENS) (N)	0	Bit Size (BS) (MM)	600	100	100	Bit Size (BS) (MM)	600
Bit Size (BS) (MM)	125	FCD2 (FCD) (MM)	600	100	100	FCD3 (FCD) (MM)	600
Gamma Ray (GR) (GAPI)	0	PRIMARY CALIPER (HCAL) (MM)	600	100	100	PRIMARY CALIPER (HCAL) (MM)	600
PRIMARY CALIPER (HCAL) (MM)	125	Future Casing					
Annulus From BS2 to FCD2				Annulus From FCD3 to BS3			
Tight Spot From BS2 to HCAL_1				Tight Spot From HCAL_2 to BS3			
Washout From HCAL_1 to BS2				Washout From BS3 to HCAL_2			
Formation Between LHT2 and HCAL_1				Formation Between HCAL_2 and RHT3			

PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Cement Volume Major Pip Every 1 M3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BHT	Bottom Hole Temperature (used in calculations)	40 DEGC
BS	Bit Size	216.000 MM
DO	Depth Offset for Logical Unit 1	0.0 M
FCD	Future Casing (Outer) Diameter	178 MM
GGRD	Geothermal Gradient	2 DC/M
GTSE	Generalized Temperature Selection	HSTS HTEM
HCOM	HILT Speed Correction Mode	Ro 60
HSTI	STI Uses HILT Acceleration	YES
HVCS	Integrated Hole Volume Calliper Selection	HCAL
LBFR	Trigger for MAXIS First Reading Label	STI
PP	Playback Processing	RECOMPUTE
SHT	Surface Hole Temperature	5 DEGC
TD	Total Depth	399.5 M
TDD	Total Depth - Driller	401.00 M
TDL	Total Depth - Logger	399.50 M

Format: CVL Vertical Scale: 1:240

Graphics File Created: 03-Aug-2001 19:02

OP System Version: 9C1-303
MCM

HILTB-FTB OP91-kp2 DTC-H OP91-kp2

Input DLIS Files

DEFAULT HILTD.014 FN:13 PRODUCER 03-Aug-2001 17:38 400.5 M 12.2 M

COMPANY	AURORA COLLEGE, INUVIK	BOTTOM LOG INTERVAL	397 m
WELL	AURORA TRAINING WELL INUVIK G-53	SCHLUMBERGER DEPTH	399.5 m
FIELD	UNDEFINED	DEPTH DRILLER	401 m
PROVINCE	NWT	KELLY BUSHING	22.605 m
		DRILL FLOOR	22.305 m
		GROUND LEVEL	17.905 m

Schlumberger

CEMENT
VOLUME

VERIFIED LOCATION

**NOTE: THERE IS A DISCREPANCY BETWEEN THE
LOCATION TYPED ON THIS FICHE AND THE LOCATION
APPEARING ON THE LOGS OR DATA. WE HAVE
VERIFIED THIS THROUGH EITHER THE GOVERNMENT
AGENCY OR THE OPERATOR OF THIS WELL, AND IT
HAS BEEN CONFIRMED THAT THE LOCATION
APPEARING ON THIS FICHE LABEL IS CORRECT.**