

CABRA CONSULTING
DAILY GEOLOGICAL WELL REPORT
2000-03-04

AEC (West) RENAISSANCE P-16

Report To: Glen Andrews

Report From: Glen Andrews

Spud Date: 2000-02-25

Telephone: 600-700-3201

Gd. Elevation: 86.4

Days from Spud: 8

Depth @ 0600: 669 m

K.B. Elevation: 90.7

Status @ 0600: Rigging out.

Formation: Hare Indian

24 hr Progress: 0 m

Average ROP: 0 m/hr

Cumulative Cost: \$1,025,900

OPERATIONS SUMMARY - Last 24 Hours

Pull wiper trip. Circulate. Pull out of hole to log. Rig in loggers. Log with Schlumberger. Rig out loggers. Lay down pipe & collars. Run 114.3mm casing landed @ 669m. Circulate. Rig in cementers. Cement casing plug down @ 0035 Hrs 03-02-2000. Set slips & cut casing. Tear out. Release rig 0600 March 4,

SURVEYS

657m -

SAMPLE TOPS

Formation

Sample

Depth

TVD Subsea

Prognosis

Subsea

Change

SFC CSNG

136.0

136.0

-45.3

IMPERIAL

308.0

308.0

-217.3

-213.0

-4.3

CANOL

507.0

507.0

-416.3

-412.0

-4.3

KEE SCARP

513.0

513.0

-422.3

-417.0

-5.3

HARE INDIAN

637.0

637.0

-546.3

-534.0

-12.3

FORECAST ACTIVITIES

Tear out & move rig to next location:

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Post-It Fax Note	Date	# of pages
To LEANSA FISHER	From WENDY	
Co./Dept. RENAISSANCE	Co. AEC	
Phone # 750-1607	Phone # 261-2455	
750-1665	Fax # 716-2455	

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Post-It Fax Note	Date	# of pages
To ANDY GRAW	From BOB TUPPER	
Co./Dept. NEB	Co. AEC	
Phone #	Phone # 213-2635	
Fax # 292-5976	Fax # 716-2455	

CABRA CONSULTING
DAILY GEOLOGICAL WELL REPORT
2000-03-03

AEC (West) RENAISSANCE P-16

Report To: Glen Andrews	Report From: Glen Andrews
Spud Date: 2000-02-25	Telephone: 600-700-2868
Gd. Elevation: 86.4	Days from Spud: 7
Depth @ 0600: 669 m	K.B. Elevation: 90.7
Status @ 0600: Circulate & prep for wiper trip @ TD	Formation: Hare Indian
24 hr Progress: 96 m	Average ROP: 4.0 m/hr
Cumulative Cost: \$925,000	

OPERATIONS SUMMARY - Last 24 Hours

Drill ahead to T.D. of 669m @ 0545 Hrs. Circulate & pull wiper

MUD PROPERTIES

Type: Gel Chem
Density: 1100 kg/m³
Viscosity: 47 s/L
Water Loss: 8.5 cm³/30 min
pH: 9.0
Filter Cake: 1 mm

SAMPLE TOPS

Formation	Sample Depth	TVD Subsea	Prognosis Subsea	Change
SFC CSNG	136.0	136.0 -45.3		
IMPERIAL	308.0	308.0 -217.3	-213.0	-4.3
CANOL	507.0	507.0 -416.3	-412.0	-4.3
KEE SCARP	513.0	513.0 -422.3	-417.0	-5.3
HARE INDIAN	637.0	637.0 -546.3	-534.0	-12.3

FORECAST ACTIVITIES

Wiper trip. Circulate. Pull out of hole to log. Rig in loggers. Log with

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Fax # 750-1865	Fax # 716-2455		

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Co./Dept. NEB	Co. AEC		
Phone #	Phone # 213-2625		
Fax # 292-5076	Fax # 716-2455		

CABRA CONSULTING
DAILY TOTAL GAS REPORT
2000-03-03

AEC (West) RENAISSANCE P-16

TOTAL GAS RESPONSE SUMMARY

Depth Interval (metres)	Total Gas Response (units)	Depth Interval (metres)	Total Gas Response (units)
565-577	140-150	595-640	100-200
577-595	200-270	640-669	70-120

CABRA CONSULTING
DAILY GEOLOGICAL WELL REPORT
2000-03-02

AEC (West) RENAISSANCE P-16

Report To: Glen Andrews	Report From: Glen Andrews
	Telephone: 600-700-2868
Spud Date: 2000-02-25	Days from Spud: 6
Gd. Elevation: 86.4	K.B. Elevation: 90.7
Depth @ 0600: 573 m	Formation: Kee Scarp
Status @ 0600: Drilling ahead.	
24 hr Progress: 46 m	Average ROP: 3.5 m/hr
Cumulative Cost:	

OPERATIONS SUMMARY - Last 24 Hours

Trip out of hole to core. Pick up core barrel. Run in hole. Circulate. Start coring @ 1145 hrs. Cut core #1 from 527.6m to 536.6m. Circulate. Trip out of hole with core #1. Recover 9.0 meters. Lay down core barrel. Run in hole. Drill ahead &

SURVEYS

570m -

MUD PROPERTIES

Type: Gel chem
Density: 1080 kg/m³
Viscosity: 45 s/L
Water Loss: 9.0 cm³/30 min
pH: 9.0
Filter Cake: 2 mm

SAMPLE TOPS

Formation	Sample Depth	TVD	Subsea	Prognosis Subsea	Change
SFC CSNG	136.0	136.0	-45.3		
IMPERIAL	308.0	308.0	-217.3	-213.0	-4.3
CANOL	507.0	507.0	-416.3	-412.0	-4.3
KEE SCARP	513.0	513.0	-422.3	-417.0	-5.3

FORECAST ACTIVITIES

Drill ahead & survey to T.D.

CABRA CONSULTING
DAILY TOTAL GAS REPORT
2000-03-02

AEC (West) RENAISSANCE P-16

SIGNIFICANT TOTAL GAS RESPONSE SUMMARY

Depth Interval (metres)	Total Gas Response (units)	Average Background (units)	Interpreted Lithology
548-550	227	130	Limestone
557-563	265	130	Limestone

CABRA CONSULTING
DAILY GEOLOGICAL WELL REPORT
2000-03-01

AEC (West) RENAISSANCE P-16

Report To: Glen Andrews	Report From: Glen Andrews
Spud Date: 2000-02-25	Telephone: 600-700-2868
Gd. Elevation: 86.4	Days from Spud: 5
Depth @ 0600: 527 m	K.B. Elevation: 90.7
Status @ 0600: Circulating for possible core point	Formation: Kee Scarp
24 hr Progress: 19 m	Average ROP: 3 m/hr
Cumulative Cost:	

OPERATIONS SUMMARY - Last 24 Hours

Nipple up. Pressure test. Run in hole. Drill out shoe @ 2215 Hrs. Circulate & displace hole to mud. Drill ahead to 527.5m. Circulate sample. Core point. Please Note change in Canol top:

SURVEYS

No new

MUD PROPERTIES

Type: Gel Chem
Density: 1120 kg/m³
Viscosity: 44 s/L
Water Loss: 14.0 cm³/30 min
pH: 9.0
Filter Cake: 1 mm

SAMPLE TOPS

Formation	Sample Depth	TVD Subsea	Prognosis Subsea	Change
SFC CSNG	136.0	136.0	-45.3	
IMPERIAL	308.0	308.0	-217.3	-213.0
CANOL	507.0	507.0	-416.3	-412.0
KEE SCARP	513.0	513.0	-422.3	-417.0
				-5.3

FORECAST ACTIVITIES

Trip out of hole. Pick up & make up core barrel. Run in hole. Cut 9m core in Kee Scarp

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To	LEAHSA FISHER		
From	WENDY		
Co./Dept.	RENAISSANCE		
Co.	AEC		
Phone #	750-1807		
Phone #	261-2455		
Fax #	750-1865		
Fax #	716-2455		

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To	ANDY GRAW		
From	BOB TUPPER		
Co./Dept.	NEB		
Co.	AEC		
Phone #	213-2625		
Phone #	292-5876		
Fax #	716-2455		

CABRA CONSULTING
DAILY GEOLOGICAL WELL REPORT
2000-02-28

AEC (West) RENAISSANCE P-16

Report To: Glen Andrews

Spud Date: 2000-02-25

Gd. Elevation: 86.4

Depth @ 0500: 508 m

Status @ 0500: WOC. Nipple up

24 hr Progress: 27 m

Cumulative Cost: \$811,000

Report From: Glen Andrews

Telephone: 600-700-3201

Days from Spud: 4

K.B. Elevation: 90.7

Formation: Canol

Average ROP: 6 m/hr

OPERATIONS SUMMARY - Last 24 Hours

Wiper trip. Mud up. Control drill to casing point of 508m. Wiper trip. Circulate. Pull out of hole. Rig to & run casing. Cement casing plug down @ 0245. WOC.

SURVEYS

500m -

SAMPLE TOPS

Formation	Sample Depth	TVD	Subsea	Prognosis Subsea	Change
SFC CSNG	136.0	136.0	-45.3		
IMPERIAL	308.0	308.0	-217.3	-213.0	-4.3
CANOL	504.0	504.0	-413.3	-412.0	-1.3

FORECAST ACTIVITIES

Finish pressure testing. Run in hole. Drill out cement. Drill 159mm hole in Kee Scarp. Possible

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Post-it Fax Note	Date	# of pages
To LEAHSA FISHER	From WENDY	
Co./Dept. RENAISSANCE	Co. AEC	
Phone # 750-1607	Phone # 261-2455	
Fax # 750-1865	Fax # 716-2455	

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Post-it Fax Note	Date	# of pages
To ANDY GRAW	From BOB TRUPPER	
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CABRA CONSULTING
DAILY GEOLOGICAL WELL REPORT
2000-02-28

AEC (West) RENAISSANCE P-16

Report To: Glen Andrews	Report From: Glen Andrews
	Telephone: 600-700-2868
Spud Date: 2000-02-25	Days from Spud: 3
Gd. Elevation: 86.4	K.B. Elevation: 90.7
Depth @ 0600: 481 m	Formation: Imperial
Status @ 0600: Tripping	
24 hr Progress: 213 m	Average ROP: 12 m/hr
Cumulative Cost: \$688,000	

OPERATIONS SUMMARY - Last 24 Hours

Drill ahead & survey to 481m. Background gas 150-250 units. No significant gas shows. Circulate bottoms up. Pull out of hole for wiper trip @ 0510

SURVEYS

324m - 2.0°; 373m - 2.5°; 421m - 2.5°; 469m -

MUD PROPERTIES

Type: H2O
Density: 1010 kg/m³
Viscosity: 29 s/L
Water Loss: cm³/30 min
pH:
Filter Cake: mm

SAMPLE TOPS
Formation
SFC CSNG
IMPERIAL

Sample Depth	TVD Subsea		Prognosis Subsea	Change
136.0	136.0	-136.0		
308.0	308.0	-308.0	-213.0	-95.0

FORECAST ACTIVITIES

Finish wiper trip. Drill ahead to casing point. Pull out of hole. Run

CABRA CONSULTING
DAILY GEOLOGICAL WELL REPORT
2000-02-27

AEC (West) RENAISSANCE P-16

Report To:	Glen Andrews	Report From:	Glen Andrews
		Telephone:	600-700-2868
Spud Date:	2000-02-25	Days from Spud:	2
Gd. Elevation:	86.4	K.B. Elevation:	90.7
Depth @ 0500:	268 m	Formation:	Cretaceous
Status @ 0500:	Drilling ahead		
24 hr Progress:	132 m	Average ROP:	13 m/hr
Cumulative Cost:			

OPERATIONS SUMMARY - Last 24 Hours

Run casing & cement. WOC. Nipple up & pressure test. Rig up & run in hole. Pressure test. Drill out shoe @ 1815 hrs. Drill ahead & survey. Background Gas 150-250 units. Peaks up to 400 units from Carbonaceous

SURVEYS

227m -

MUD PROPERTIES

Type: H2O
Density: 1010 kg/m³
Viscosity: 29 s/L
Water Loss: cm³/30 min
pH:
Filter Cake: mm

SAMPLE TOPS

Formation	Sample Depth	TVD Subsea	Prognosis Subsea	Change
SFC CSNG	136.0	136.0	-136.0	

FORECAST ACTIVITIES

Drill ahead & survey to Intermediate casing

compu-max

71 Martinview Road, N.E.
 CALGARY, Alberta
 T3J 2W2 (403) 280-5857

COMPOSITE WELL HISTORY

DRILLING TIME

LITHOLOGY LOG

COMPANY: AEC (West)

WELL: AEC (West) RENAISSANCE P-16

FIELD:

PROVINCE: NWT

LOCATION: LSD SEC TWP RGE W MERIDIAN

COORDINATES: 7275226.71

532805.10 E

ELEVATIONS: GD 86.4 m

LOG MEASURED FROM KB

KB 90.7 m

4.3 m ABOVE GROUND

WELL TYPE: EXPLORATION

TOTAL DEPTH:

SPUD DATE: 2000-02-25

T.D. DATE:

LICENCE No.:

AFE No.: 5000046

CONTRACTOR: AKITA #14

CORES:

MUD TYPE:

MUD UP @:

SAMPLES: 2.5 & 5 METER INTERVALS

AEC/REN: 136 to T.D.

NWTB: 136 to T.D.

DSTs:

OPEN HOLE LOGS:

SUPERVISION

GEOLOGICAL: Glen MacIntosh

DRILLING: LYNN SANDQUIST

CASING DEPTH

SURFACE: 136.0 m
 INTERMEDIATE: m
 MAIN: m

CASING SIZE

SURFACE: 244.5 mm
 INTERMEDIATE: mm
 MAIN: mm

HOLE SIZE

SURFACE: 311.2 mm
 INTERMEDIATE: 222 mm
 MAIN: 159.4 mm

REMARKS:

ROCK TYPE

	CONGLOMERATE
	SANDSTONE
	SILTSTONE
	SHALE, grey
	SHALE, black
	SHALE, coloured
	CHERT
	LIMESTONE
	DOLOMITE

	ANHYDRITE
	COAL
	CLAYSTONE, grey
	CLAYSTONE, col
	MARLSTONE, calc
	MARLSTONE, dol
	SALT
	SIDERITE, LIMONITE
	BRECCIA

	IGNEOUS, basic
	IGNEOUS, acidic
	CANNOT INTERPRET
	NO SAMPLE
	CEMENT
	TUFF
	ULTRABASIC

ACCESSORIES

	SANDY
	SILTY
	FELDSPAR
	SILICEOUS
	CHERTY, light
	CHERTY, dark
	ARGILLACEOUS
	CARBONACEOUS
	BITUMENOUS
	CALCAREOUS
	LIMESTONE strg
	DOLOMITIC
	DOLOMITE strg
	ANHYDRITIC
	ANHYDRITE strg
	PHOSPHATE pel
	FERRUGINOUS

	GLAUCONITIC
	BENTONITIC
	PYRITIC
	KAOLINITIC
	BIOCLASTIC
	OOLITES
	PELLETS
	INTRACLASTS
	FOSSILS
	CRINOID
	PELECYPOD
	BRACHIOPOD
	OSTRACOD
	CORAL
	STROMATOPOROID
	AMPHIPORA
	FISH REMAINS

	PLANT REMAINS
	BRECCIA frag
	SANDSTONE strg
	SILTSTONE strg
	SHALE lam
	TUFFACEOUS
	Heavy, dark Minerals
	FORAMINIFERA/Rad
	ANTIGORITE
	BRUCITE
	BRONZITE
	CHROMITE
	CHRYSOTILE
	DUNITE
	TALC
	SERPENTINE

OIL SHOWS

- EVEN STAINING, FLUORESCES
- SPOTTY STAIN, FLUORESCES
- QUESTIONABLE, NO FLUORESCENCE,
- DEAD, ASPHALTIC

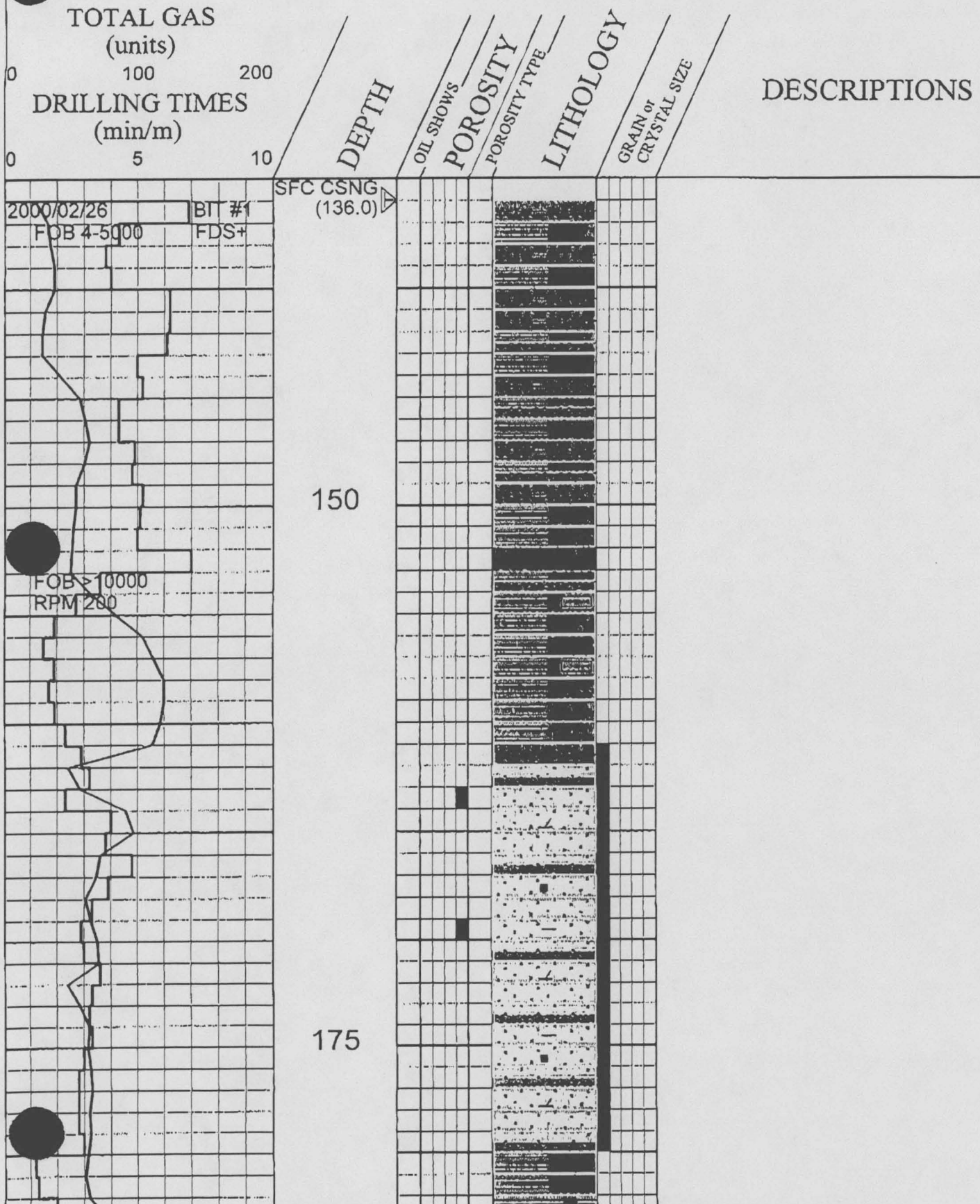
POROSITY TYPES

- x INTERCRYSTALLINE, INTERGRANULAR
- ◇ INTEROOLITIC, INTEPELLETOID,
- v VUGGY,
- p PINPOINT,
- ✓ MOLDIC
- o ORGANIC
- f FRACTURE
- e EARTHY
- FENESTRAL

DUNHAM CLASSES

- PK PACKSTONE
- WK WACKESTONE
- MD MUDSTONE
- BD BOUNDSTONE
- GR GRAINSTONE

SCALE 1:240

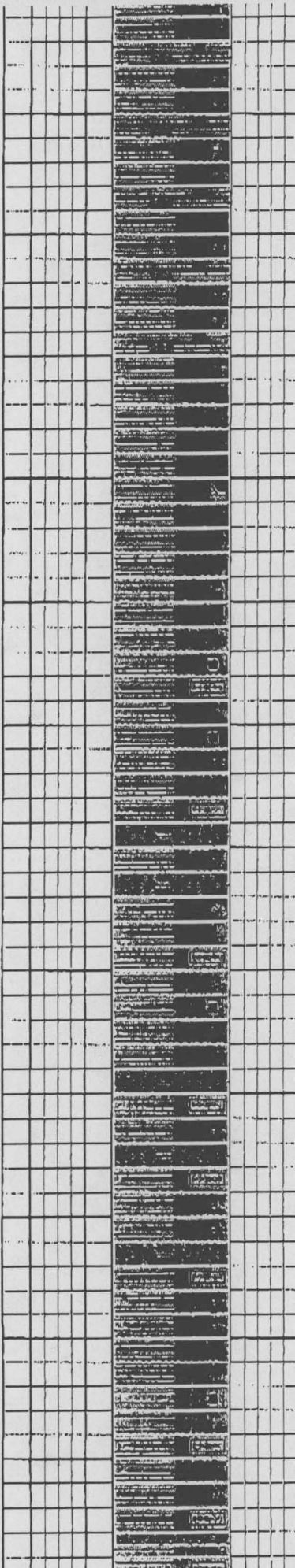


FOB 10000
RPM 200
H2O

200

225
S-1.0°

250



TG SCALE CHANGE X2

0 200 400

275

300

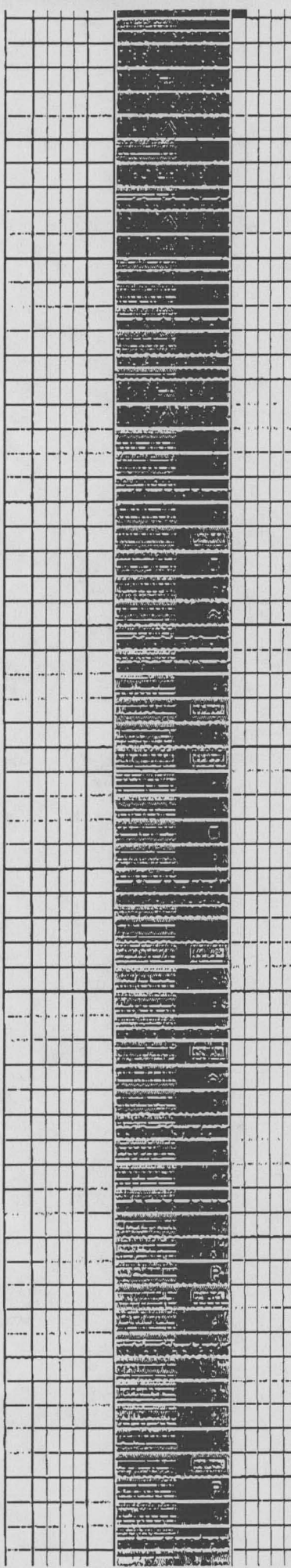
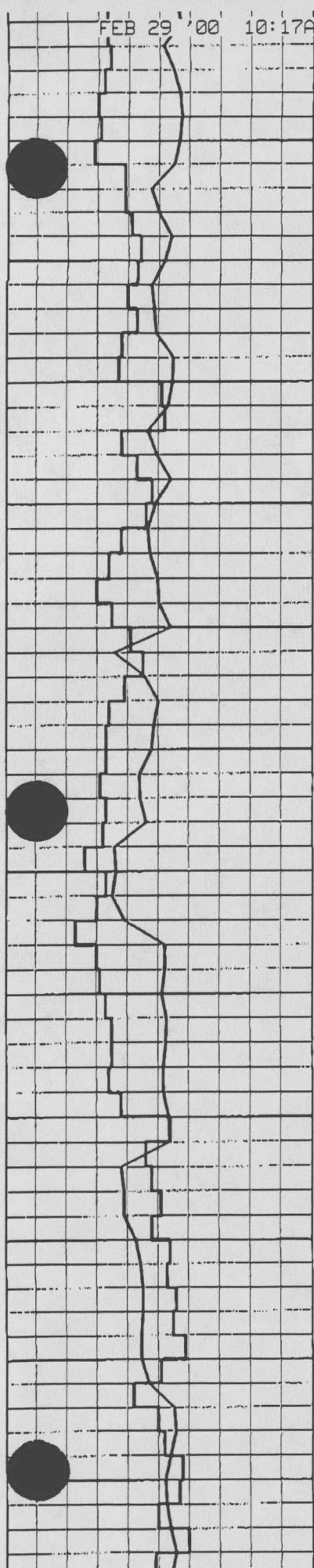
IMPERIAL
(308.0)

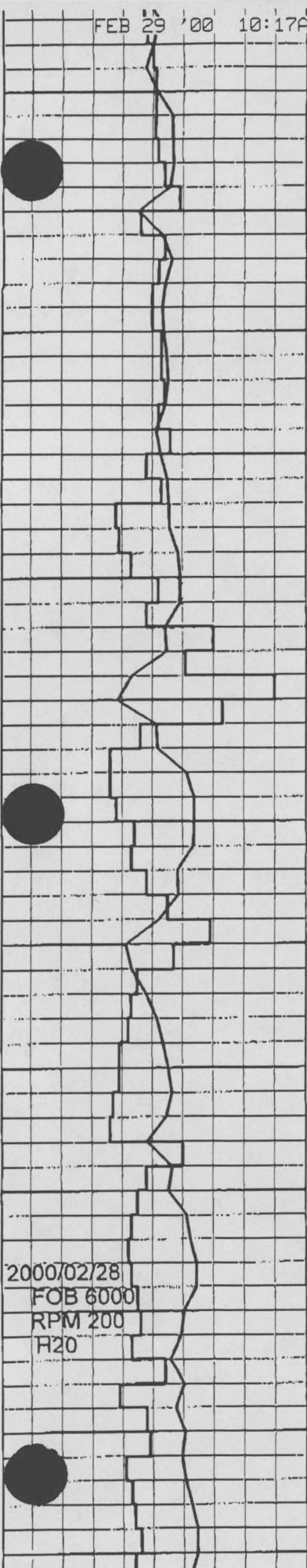
D
D
D
D

S-2.0°
325

350

S-2.5°
375



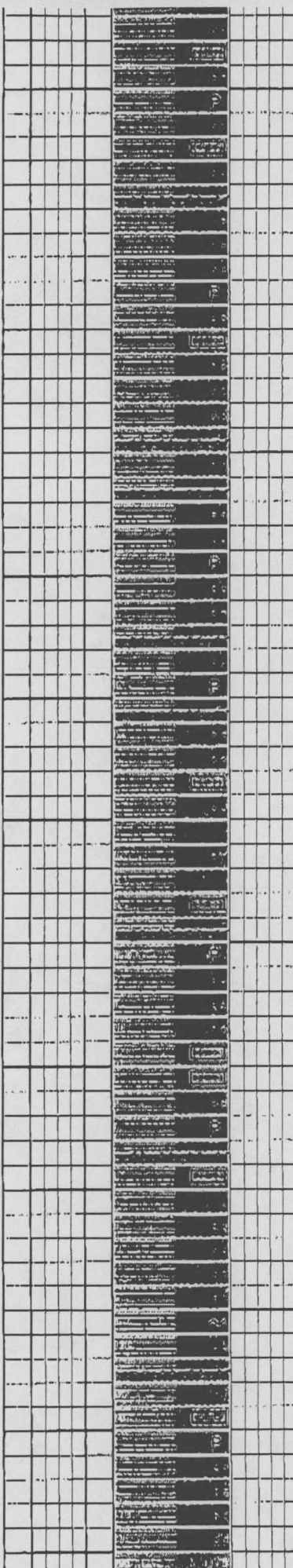


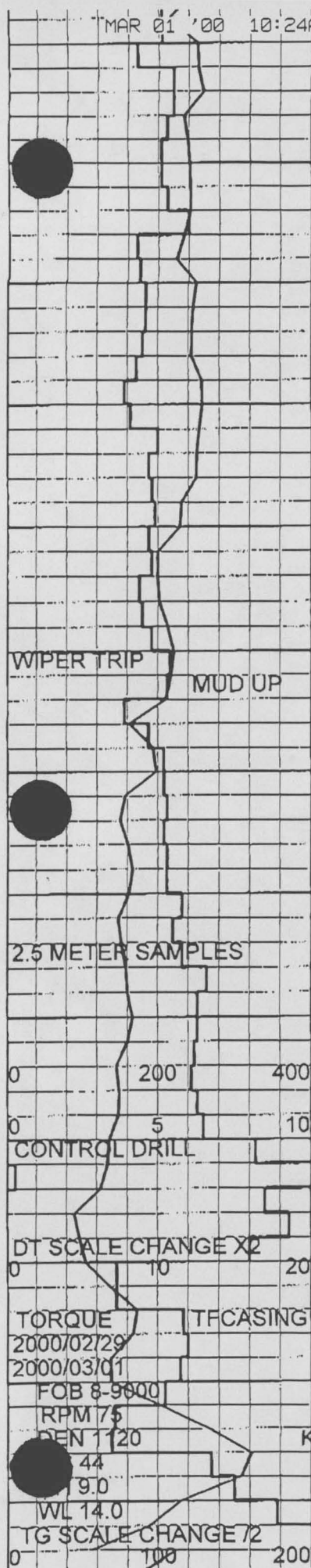
400

S-2.5°

425

450





S-3.0°

475

S-2.0°

500

CANOL
(507.0)KEE SCARP
(513.0)

SHALE - dark grey to black, fissile, platy, firm, silty to highly silty, minor disseminated pyrite, micromicaceous; Minor Siderite & Siltstone stringers.

SHALE - dark grey to black, fissile, platy, firm, silty, minor disseminated pyrite, micromicaceous; Minor Siderite & Siltstone stringers.

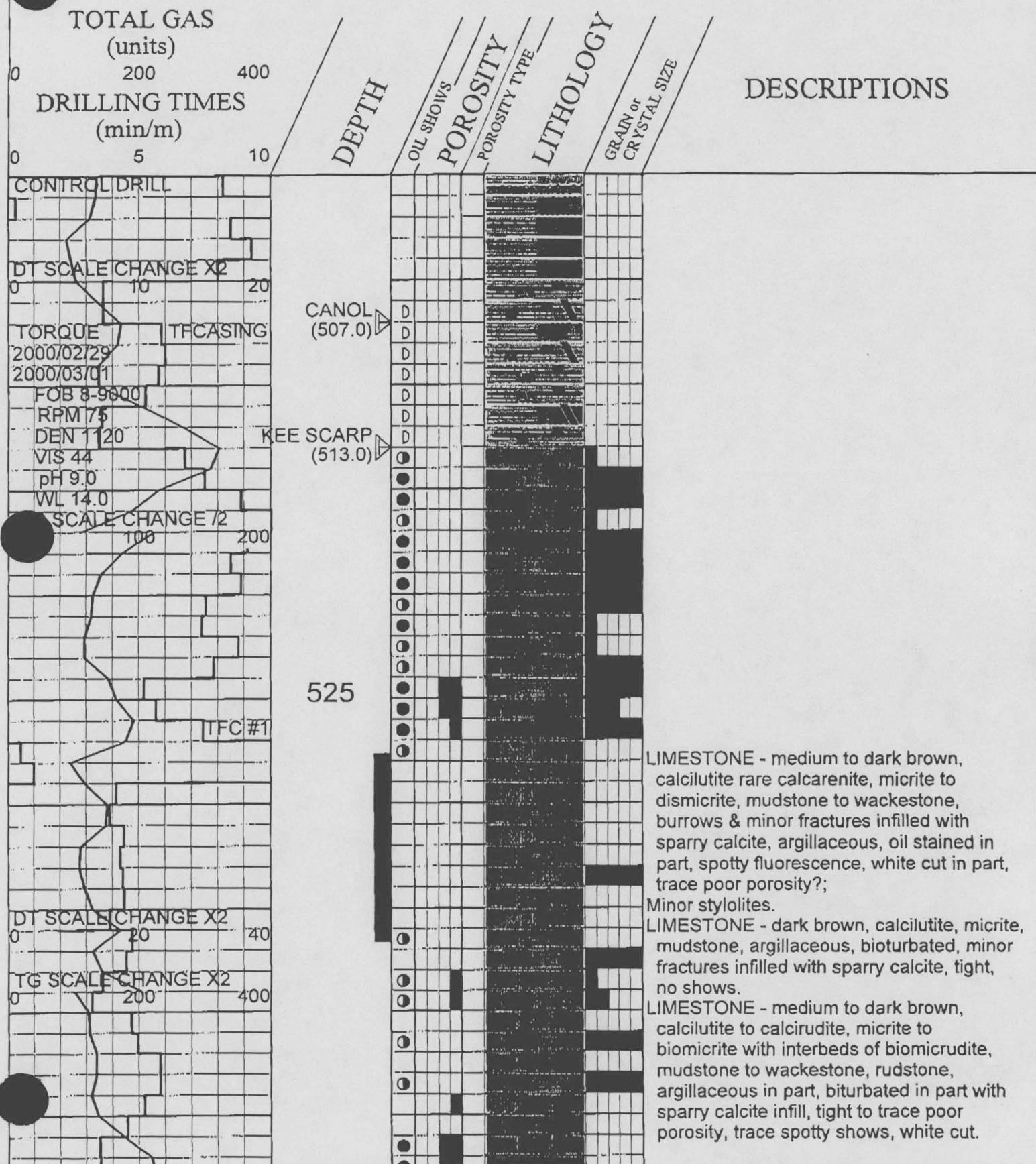
SHALE - dark grey to black, subblocky to blocky, minor disseminated pyrite, slightly silty, calcareous, slightly bituminous.

SHALE - dark grey to black to deep brown, fissile to subfissile, blocky, carbonaceous, bituminous, calcareous in part.

LIMESTONE - white to dark brown, fine to coarse calcirudite, stromatoporoid biomicrite, floatstone to rudstone, coral biomicrite matrix, slightly argillaceous, spotty to even oil staining, slow white cut,

CANSTRAT SYMBOLS USED FOR LITHOLOGY AND SHOWS

SCALE 1:240



FORMATION: KEE SCARP

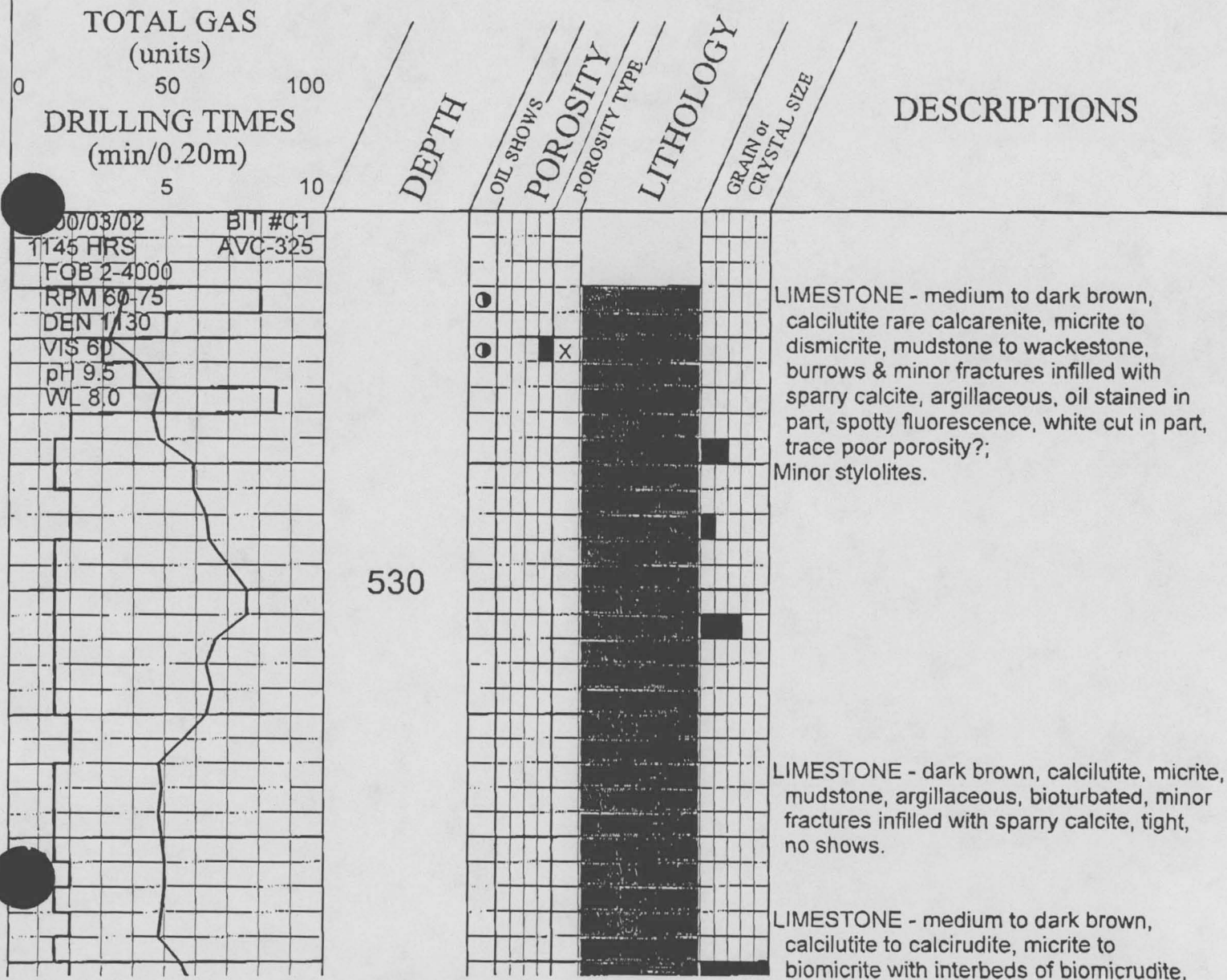
CORE: START 527.6 m END 536.6 m
CUT 9.0 m RECOVERED 9.0 m
SIZE 156 mm CORING TIME 1.75

COMPANY: BAKER HUGHES

CORE HAND: RICHARD ROONEY

REMARKS: 7 BOXES OF CORE SENT TO CALGARY VIA AIR

SCALE 1:48



MAR 02 '00 08:21AM AEC

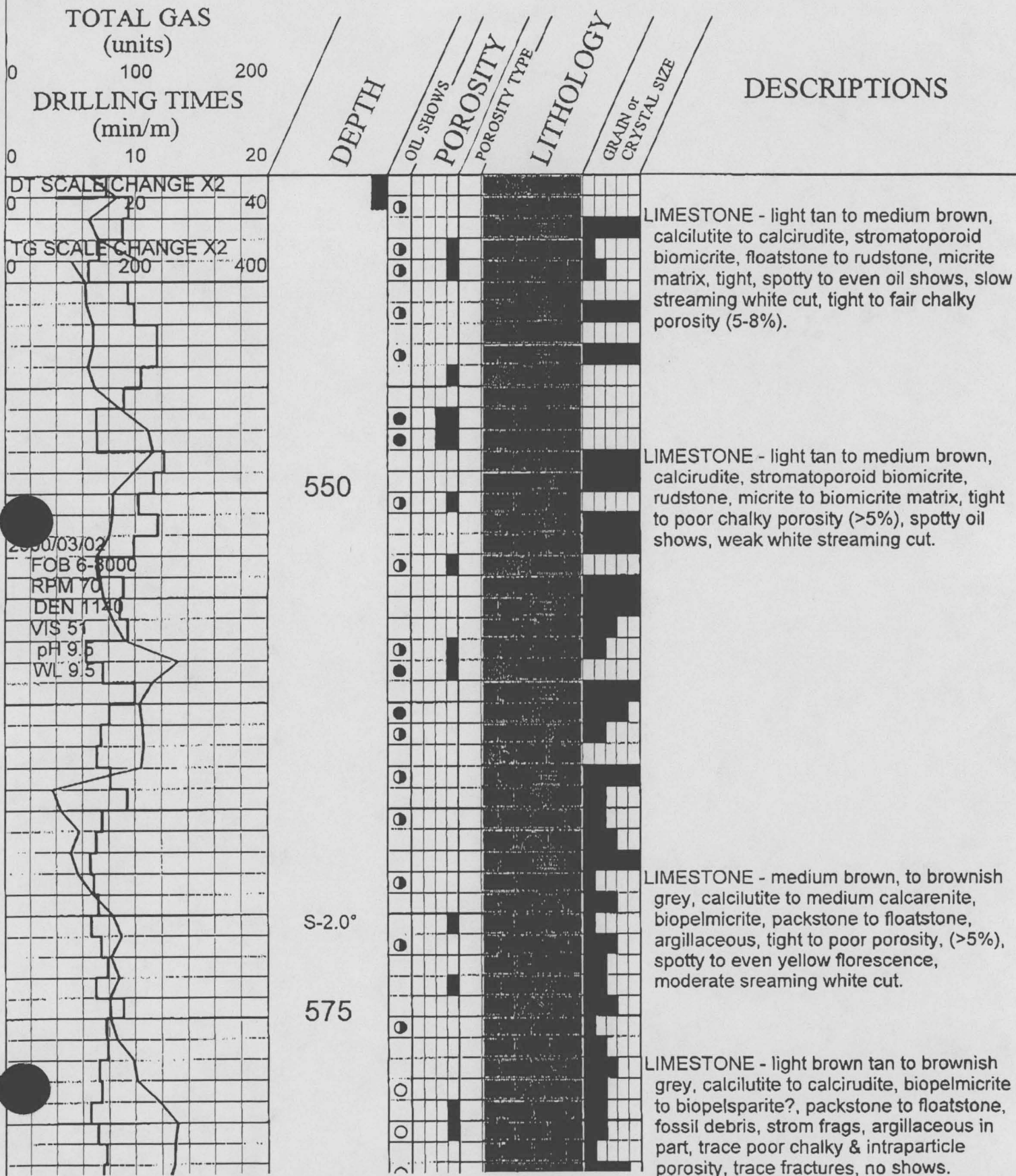
535

1323 HRS

porosity, trace spotty shows, P. 13/13.

CANSTRAT SYMBOLS USED FOR LITHOLOGY AND SHOWS

SCALE 1:240



600

LIMESTONE - light brown tan, calcilutite to medium calcarenite, biopelmicrite, packstone to wackestone, fossil debris, argillaceous, tight to trace poor chalky porosity, spotty oil stain, ? florescence, weak white cut.

LIMESTONE - medium to dark brown, calcilutite to fine calcarenite, biopelmicrite, wackestone to packstone, argillaceous to highly argillaceous, silty, tight, no shows.

SHALE - dark grey, brownish, fissile, platy, slightly bituminous, slightly calcareous.
LIMESTONE - medium to dark brown to grey brown, calcilutite to very fine calcarenite, micrite to biopelmicrite, mudstone to wackestone, argillaceous, tight, weak white cut, ? show.

LIMESTONE - light brown tan, calcarenite to calcirudite, biosparite, grainstone, trace calcite fracture fill, siliceous, silty, tight, spotty florescence, slow white cut.

HARE INDIAN
(637.0)

Siltstone with Shale laminae & Limestone stringers:

SILTSTONE - medium to dark brown, silt to very fine Sandstone, well cemented, highly calcareous, trace carbonaceous, micaceous, argillaceous grading to silty Shale.

Limestone with Siltstone stringers:

LIMESTONE - light to medium brown to grey

650

CANSTRAT SYMBOLS USED FOR LITHOLOGY AND SHOWS

SCALE 1:240

