

DEPT. NAT. RES & ENV



PE906319

OIL and GAS DIVISION

ADDENDUM 2

Phillips Australian Oil Company

SELENE-1

11 JUL 1983

Geoservices Final Well Report

W795 FINAL REPORT

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PHILLIPS Aust. Oil Co.

SELENE # 1

Location

Lat 38 37' 25.159"
Long 148 26' 11.357"

State : VICTORIA

Country : AUSTRALIA

District : Gippsland Bassin (offshore)

Block : VIC P18

Water depth (MSL): 254 m

Rig

Diamond M Marine Co.
Diamond M Epoch
Semi-submersible type platform
Elevation KB: 23 m above MSL

Logging

GEOSERVICES TDC ON-LINE

Total Depth	3539m
Spudded on	27 th December 1982
Reached TD on	5 th February 1982

GEOSERVICES T.D.C.

SELENE # 1

WELL SUMMARY

Selene # 1 was a vertical exploration well drilled in the North-Eastern corner of Permit VIC/P18. The exact location was on shot point 180 on seismic line GP81-91.

The permit VIC/P18 is located in the highly productive Gippsland basin. Selene # 1 was programmed to penetrate the large Intra-Latrobe sand body of lower Paleocene age.

The objectives of Selene # 1 were:

- Evaluate the hydrocarbon potential of top Latrobe sand reservoir.
- Determine the geometry and reservoir potential of the lower Paleocene sand body developed within the Intra-Latrobe group.
- Determine stratigraphic facies relationship and hydrocarbon potential of the Intra-Latrobe sequence to just below the Upper-Cretaceous unconformity level.

Selene # 1 was spudded on 27/12/82 and reached TD on 5/2/83, 42 drilling days. A total of 15 bits (new) were used to drill the well. No overpressure was detected.

After having logged the 8 1/2" open hole and performed RFT and CST, the well was plugged and abandoned on February 1983.

PE906320

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The enclosure PE906320 has the following characteristics:

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CONTAINER_BARCODE = PE906319
 NAME = Location Map
 BASIN = GIPPSLAND
 PERMIT = VIC/P18
 TYPE = GENERAL
 SUBTYPE = PROSPECT_MAP
 DESCRIPTION = Location Map showing Selene-1
 REMARKS =
 DATE_CREATED = 28/02/83
 DATE_RECEIVED = 11/07/83
 W_NO = W795
 WELL_NAME = SELENE-1
 CONTRACTOR = GEOSERVICES
 CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE906321

This is an enclosure indicator page.
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document.

The enclosure PE906321 has the following characteristics:

ITEM_BARCODE = PE906321
CONTAINER_BARCODE = PE906319
NAME = Daily Metrage Chart
BASIN = GIPPSLAND
PERMIT = VIC/P18
TYPE = WELL
SUBTYPE = DIAGRAM
DESCRIPTION = Daily Metrage Chart for Selene-1
REMARKS =
DATE_CREATED = 28/02/83
DATE_RECEIVED = 11/07/83
W_NO = W795
WELL_NAME = SELENE-1
CONTRACTOR = GEOSERVICES
CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

Elevation KB 0.0 m

Hole 36"
at 328.0 m

30" Casing shoe at 327.2 m

Hole 26"
at 589.0 m

20" Casing shoe at 581.5 m

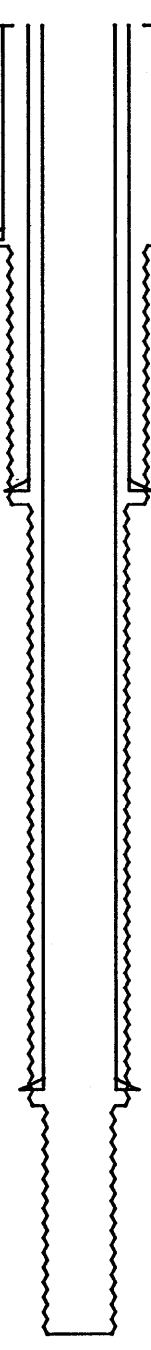
Hole 17" 1/2
at 1268.0 m

13" 3/8 Casing shoe at 1262.0 m

Hole 12" 1/4
at 2898.0 m

9" 5/8 Casing shoe at 2875.7 m

Hole 8" 1/2
at 3539.0 m



PE906322

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document.

The enclosure PE906322 has the following characteristics:

ITEM_BARCODE = PE906322
CONTAINER_BARCODE = PE906319
 NAME = Bit Record
 BASIN = GIPPSLAND
 PERMIT = VIC/P18
 TYPE = WELL
 SUBTYPE = DIAGRAM
 DESCRIPTION = Bit Record Table for Selene-1
 REMARKS =
 DATE_CREATED = 28/02/83
 DATE_RECEIVED = 11/07/83
 W_NO = W795
 WELL_NAME = SELENE-1
 CONTRACTOR = GEOSERVICES
 CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

 Phillips Aust Co. Selene # 1 MUD REPORT

DEPTH m	WEIGHT ppg	FV	PV	YP	Gels	CAKE		pH	ALKALINITY		Cl- ppm	OIL %	Ca++ ppm	Ttl Cost dollars	N	K	
						WL cc	thks /32		fil	mud							
1894.0	9.30	47	15	12	2	15	7.0	1	10.0	0.8	2.0	13000	0.0	360	48891	0.6779	0.3647
1916.0	9.40	41	13	11	4	16	8.2	2	10.0	0.4	1.1	12000	0.0	160	54772	0.7223	0.2212
2024.0	9.40	47	14	11	4	16	7.8	1	10.0	0.4	0.9	12000	0.0	80	57752	0.7368	0.2122
2086.0	9.30	47	14	11	5	21	7.7	1	10.5	0.5	1.2	12000	0.0	60	62564	0.7653	0.1691
2183.0	9.40	46	11	11	4	18	8.8	1	9.5	0.1	0.4	13000	0.0	160	64662	0.6879	0.2467
2225.0	9.40	46	11	11	4	18	8.8	1	9.5	0.1	0.4	13000	0.0	160	68459	0.6879	0.2467
2403.0	9.40	47	12	11	6	22	9.1	2	9.5	0.1	0.3	15000	0.0	120	72266	0.7703	0.1394
2567.0	9.50	51	12	17	14	35	9.6	2	9.0	0.1	0.2	16000	0.0	280	72266	0.8478	0.0759
2618.0	9.40	44	11	12	8	26	9.9	2	9.0	0.1	0.3	16000	0.0	200	76847	0.7933	0.1065
2750.0	9.50	45	12	28	19	41	10.6	2	9.5	0.2	0.4	16500	0.0	160	76847	0.6519	0.3603
2886.0	9.40	38	8	14	8	20	10.0	2	9.5	0.3	0.4	16500	0.0	80	81401	0.6519	0.2402
2898.0	9.40	42	11	18	11	22	10.7	2	9.0	0.1	0.1	17000	0.0	80	81401	0.6879	0.2467
2944.0	9.00	40	10	10	2	12	7.1	1	9.0	0.1	0.6	16000	0.0	100	93801	0.6373	0.3383
3045.0	9.00	42	11	10	2	12	6.5	1	9.0	0.1	0.7	17000	0.0	140	93801	0.6588	0.3123
3123.0	9.00	41	11	10	2	13	6.6	1	8.5	0.1	0.4	18000	0.0	180	94319	0.6588	0.3123
3141.0	9.00	44	9	13	2	17	6.4	1	9.0	0.1	0.4	17000	0.0	180	94319	0.5359	0.7073
3154.0	9.00	44	11	10	2	16	6.3	1	8.5	0.1	0.4	17000	0.0	180	95941	0.6588	0.3123
3159.0	9.00	45	11	11	2	18	6.4	1	8.5	0.1	0.7	17000	0.0	180	95941	0.6321	0.3882
3161.0	9.00	44	11	12	2	23	6.2	1	8.5	0.0	0.7	17000	0.0	180	98337	0.6075	0.4751
3255.0	9.10	43	12	11	2	23	6.3	1	8.5	0.0	0.4	18000	0.0	160	100514	0.6519	0.3603
3355.0	9.00	41	10	10	2	10	5.8	1	10.0	0.3	0.8	19000	0.0	180	100514	0.6373	0.3383
3394.0	9.00	42	14	15	2	10	5.7	1	10.0	0.3	0.8	19000	0.0	180	102890	0.6025	0.6303
3523.0	9.00	44	14	16	2	10	5.8	1	10.0	0.3	0.8	17000	0.0	120	102890	0.5848	0.7299

WELL DIARY

Drilling Day # 1 (27.12.82)

Spud in at 01.00hr. in 254m of seawater
Jet down to 283m with Bit # 1 SMITH DSJ 14 3/4" (3*16).
POOH with jet string.
Pick up Bit # 2 HUGHES 3AJ 26" (3*28) and 36" (3*22) Hole Opener.
RIH and jet down to 278m.
Drill ahead from 276m to 300m.
Pump 30 bbls of gel pill.
Survey at 300m, 3/4 deg. deviation.
Drill ahead from 300m to 328m.
Pump 50 bbls of gel pill.
Survey at 328m, 1/2 deg deviation.
Short wiper trip, no overpull.
Circulate with seawater and displace with 175 bbls of high viscous mud.
POOH and rig up to run 30" casing.
Rig up guide base plate and run in with 30" casing.

Drilling Day # 2 (28.12.82)

Continue running in 30" casing.
Fill drill pipe with seawater and circulate.
Pump 1200 bbls (capacity of casing).
Test to 3000 psi.
Cement 30" casing (shoe set at 327.2m).
Release running tool and POOH.
Wait on cement.
Pick up Bit # 3 HUGHES OSC 3J 26" (3*28) and RIH.
Drill out cement and shoe.
Drill ahead 26" hole from 328m to 464m, spotting a viscous pill every second single.
Drop survey at 464m.

Drilling Day # 3 (29.12.82)

Survey tool stuck, wire line snapped
POOH to retrieve survey tool.
RIH with Bit # 3RR.
Survey at 464m, 1/2 deg deviation.
Drill ahead from 464m to 589m.
Circulate to clean hole.
POOH nine stands, work on Hydril and BOP Stack.
RIH to bottom and circulate pumping sea water.
Pump high viscous slug and PCOH.
Work on BOP stack.
Rig up to run 20" casing.

Drilling Day # 4 (30.12.82)

Continue rigging up 20" casing.

Run in 20" casing (casing shoe set at 581.5m).

Land casing and test pull.

Circulate and pump 300 bls. of high viscous mud, chase with 500 bls. of sea water.

Back out running tool, POOH and land running tool.

RIH with stinger assembly.

Circulate with sea water while waiting on Solus.

Check well head with Solus camera.

Break circulation, rig up Haliburton and test lines.

Cement in 20" casing.

Flush stinger pipe with water and POOH.

Drilling Day # 5 (31.12.82)

Work on BOP stack.

Drilling Day # 6 (1.1.83)

Work on and test BOP stack.

Move stack over moonpool and latch on hydril.

Pick up stack, hydril and first joint of riser.

Run in with riser string.

Drilling Day # 7 (2.1.83)

Continue running in riser string.

Riser string not holding pressure, test individual joints.

Unable to hold pressure, pull out riser string and BOP stack.

Work on BOP stack.

Run back in with BOP stack and riser string.

Leak in water lines.

Pull out checking riser string and BOP stack.

Drilling Day # 8 (3.1.82)

Continue working on BOP stack.

Run in with BOP and riser string.

Unable to maintain testing pressure.

Pull out BOP stack and riser string.

Work on BOP stack.

Run in BOP stack and riser string, testing each joint to 5000 psi.

Riser leaking, pull out BOP stack and riser string.

Work on BOP stack and replace bell nipple.

Drilling Day # 9 (4.1.83)

Continue working on BOP's and bell nipple.
Run in with BOP stack and riser string testing to 5000 psi.

Drilling Day # 10 (5.1.83)

Continue to run in with BOP and riser string.
Pick up and nipple up slip joint.
Land BOP stack and inspect position with Solus camera.
Run in with HWDP and test tool.
Nipple up flowline.
Surface test BOP stack; Lower rams and Middle rams tested okay, Upper rams tested unsuccessfully.
Recheck Lower rams to check Haliburton equipment, tested okay.
"Fail Safe" valves of outer choke, inner choke and inner kill lines fail to test.
Pump high viscous pill round riser (70 bbls) and displace with seawater.
Retest valves, unsuccessful.

Drilling Day # 11 (6.1.83)

POOH with test plug.
Wait on weather.
Pull up and lay down diverter.
Unlatch stack, detach tensioners and lay down slip joint.
Pull out BOP stack and riser string.
Land BOP stack on moonpool beams.
Pressure test inner kill and choke and outer kill and choke to 5000 psi.
Re-position lower choke valve, modify and fabricate oil water separators.
Pressure test BOP's.
Tested upper and lower annulars to 3500 psi.
Function test BOP on both pods, good test, refill oil separators.
Stab riser onto BOP's. Pressure test choke and kill lines.

Drilling Day # 12 (7.1.83)

Test first joint of riser, choke and kill, at 5000 psi-good test.
Run second and third joints, no test on kill line.
Tighten packing, rerun third joint, no test on kill line.
Land third joint, test first and second joints, choke okay, no test on kill.
Land second joint, test first joint to 5000 psi-good test.
Pick up second, third, fourth and fifth joints-good test to 5000 psi.
Pick up sixth joint, no test on kill line.
Pull out stack.
Secure stack on beams, test kill line, leak found at female stab sub between packing.
Dismantle female stab subs on choke and kill lines.
Service 17 1/2" under-reamer and surface equipment.
Rig up to run in riser.
Wait on female stab subs.

Drilling Day # 13 (8.1.83)

Install female stab in subs on upper package choke and kill lines.
Test first joint of riser.
Run in stack and riser, testing every two joints to 5000 psi.
Run in with test plug and test BOP's from surface.
Pull out test tool.
Test kelly, pump manifold, stand pipe and other surface equipment.

Drilling Day # 14 (9.18.83)

Make up BHA and RIH with Bit # 4, SMITH DSJ 14 3/4" (3*22) and 17 1/2" under-reamer.
Tag top of cement at 398m.
Drill out cement, float collar and casing shoe with seawater.
Drill into formation and perform a LOT, formation fractured at 300 psi using an EMW of 11.7 ppg.
Drill ahead from 592m reaming the hole at each connection.
Drill ahead to 747m. Drop survey 1 deg. deviation.
Drill ahead from 747m to 848m.
Drop survey at 848m, circulate for 1 hour and POOH.

Drilling Day # 15 (10.1.83)

Continue to POOH.
RIH with new Bit # 5, SMITH DSJ 14 3/4" (3*22) and 17 1/2" under-reamer.
Drill ahead from 848m to 1151m.
Survey at 1151m misfired.
Drill ahead from 1151m to 1179m.
Survey at 1179m, 1 deg. deviation.
Drill ahead from 1179m to 1187m.

Drilling Day # 16 (11.1.83)

Continue drilling ahead to 1268.5m.
Circulate and drop survey.
POOH to 20" casing shoe.
Retrieve survey, 1/4 deg. deviation.
RIH to 1268.5m and circulate for two hours prior to logging.
Pump slug and strap the pipe out of the hole.
Rig up Schlumberger.
Run Schlumberger log # GR-DIL, SLS, MSL.
Rig down Schlumberger.
RIH to recover wear bushing.
Rig up to run in 13 3/8" casing.

Drilling Day # 17 (12.1.83)

Continue running in 13 3/8" casing.
Circulate hole clean prior to cementing.
Cement 13 3/8" casing and bump plug with 1500 psi held for 10 mins.

Drilling Day # 17 (12.1.83) cont/

Back out 13 3/8" casing running tool and POOH.
RIH with 13 3/8" casing.
Lower casing hanger to the seabed.
Circulate and begin with cementation.
Displace cement and bump plug.
RIH with test plug and test BOP stack.
BOP's test successfully, POOH with test plug.
RIH with wear bushings.
Make up new BHA and RIH with Bit # 5.

Drilling Day # 18 (13.1.82)

Continue running in, tag cement at 1247m and commence with drilling out cement and float collar.
Drill formation to 1272m, make a LOT.
Drill ahead from 1272m to 1478m.

Drilling Day # 19 (14.1.82)

Continue drilling ahead from 1478m to 1572m.
Drop survey at 1572m, 1/2 deg. deviation.
Drill ahead from 1572m to 1596m.
ROP slowing down, POOH at 1596m to change bit.
RIH with new Bit # 6.
Drill ahead from 1596m.

Drilling Day # 20 (15.1.83)

Continue drilling ahead to 1612m, very slow ROP.
POOH with Bit # 6.
RIH with Bit # 7.
Drill ahead from 1612m to 1758m.

Drilling Day # 21 (16.1.83)

Continue drilling ahead to 1789m.
Pump slug, drop survey and POOH.
Retrieve survey, 1/8 deg. deviation.
RIH with new Bit # 8.
On bottom and drill ahead from 1789m.
Lose mud, stop circulation and check pits.
Mud loss detected, drill ahead from 1794m.
Overpull at 1829m during connection, (375 klbs).
Circulate to free pipe.
Drill ahead from 1829m.
Overpull at 1838m during connection, (40 klbs), reamed down single.
Drill ahead from 1838m.
Overpull at 1855.5m during connection, (30 klbs).
Drill ahead to 1873m.

Drilling Day # 22 (17/1/83)

Drilling ahead from 1873m. Lost 100 psi at 1895m. Work on pump. Circulation prior to POOH. Hanging off: waiting on Union action. RIH. Drill ahead from 1907m. Lose pressure. P/up string. Lose of 35000 lbs in string weight. POOH.

Drilling Day # 23 (18/1/83)

RIH with overshot to fish BHA. POOH with fish. Lay down broken DC. Break down BHA.

RIH with bit # 9. Check each stand of DC and make up new BHA. Drilling from 1916m.
Trip gas : 0.4 % @ 1916m.

Drilling Day # 24 (19/1/83)

Drilling from 1988m. 50 psi loss in pressure. Increase in torque at 2040m. Drop survey and POOH.

RIH with bit # 10. Slip and cut dead line. Resume RIH. Drilling from 2047m. Trip gas : 0.2 % @ 2047m.

Drilling Day # 25 (20/1/83)

Drilling ahead from 2055m. Loss of pressure: 120 psi (total 130 psi). Decision to POOH. Check string. POOH without pumping slug. Find wash out in cracked DC.

RIH with bit # 11. Drill from 2116m.
Trip gas : 0.35 % @ 2116m.

Drilling day # 26 (21/1/83)

Drilling ahead at 2137m. 130 psi loss in pressure. Decision to POOH and inspect DC.

Drilling Day # 27 (22/1/83)

Make up BHA and RIH. Drilling ahead at 2215m. Trip gas : 0.4 % @ 2215m.
Drilling ahead. Circulation and survey at 2367m.

Drilling Day # 28 (23/1/83)

Drilling ahead from 2370m. At 2515m, work on compensators. Drop survey
at 2618m. Pump slug. POOH to change bit.

Drilling Day # 29 (25/1/83)

POOH. RIH with bit # 13. Drilling ahead at 2618m. Trip gas : 2 %.
Drilling break at 2843m. Flow check. Drill last 5 feet of kelly. Circulate
bottoms up from 2846m.

Drilling Day # 30 (25/1/83)

Resume drilling as cuttings showed no hydrocarbons.
Drilling down to 2898m. POOH. Rig up Schlumberger. Run first log: Hanging
up. POOH Schlumberger. RIH for wiper trip. Look for wash out. Start cir-
-culating and ream to bottom (50 ft).
Trip gas : 2 % (C1:0.85% ; C2:0.03% ; C3:0.005%).
Pump slug; drop survey and POOH.

Drilling Day # 31 (26/1/83)

POOH. Rig up Schlumberger. RIH Schlumberger.
Schlumberger logging consist of: DIL, SLS, GR/LDL, CNL/HDT.
Side wall coring : 51 Shots; recovered : 51 (100%).
Rig down Schlumberger. Make up 9 5/8 casing hanger and running tools.
Make up BHA and RIH; visual check joints.

Drilling Day # 32 (27/1/83)

RIH; tight spot with pipe sticking. Reaming down. Circulating on bottom. Trip gas 1 % (C1 : 0.54 %; C2 : 0.024 %; C3 : Trace). POOH. Retrieve wear bushings. Rig up to run casing. Run 9 5/8" casing.

Drilling Day # 33 (28/1/83)

Continue RIH with casing. Circulating. Cementation of 9 5/8" casing. RIH with seal assembly to test BOP's. Test BOP's. POOH seal assembly. Set wear bushings. Rig up to run CBL. Run CBL.

Drilling Day # 34 (29/1/83)

RIH with bit # 14. Slipping deadline. Drill cement at 2841m. Drill float collar. Max trip gas : 4 % (mainly H₂, C1 = 0.2 %). Drilling shoe. LOT at 2901m; equivalent mud weight for fracture grd. : 13.3 ppg. Drill ahead.

Drilling Day # 35 (30/1/83)

Drilling ahead from 2930m. Drilling break from 3019m to 3022m; circulate bottom's up. Drilling break at 3027m and 3030m; Flow check ok.

Drilling Day # 36 (31/1/83)

Drilling ahead from 3104m. Drilling break from 3137.5m to 3140.5m. Circulate out. POOH for coring. Make up core barrel. RIH with core barrel. Start circulating 150 ft off bottom and ream down. Coring from 3140.5m.

Drilling Day # 37 (1/2/83)

Stop coring at 3155.6m. Pump slug and POOH. Take out core and prepare to run for core # 2. RIH with core barrel. Reaming to bottom. Start coring.

Drilling Day # 38 (2/2/83)

Coring ahead. Stop coring at 3162.4m. POOH.

RIH with bit # 15. Drill ahead from 3162.5m.

Drilling Day # 39 (3/2/83)

Drill ahead from 3209m. Flow check 10 ft drilling break (3347m-3350m).

Drill ahead.

Drilling Day # 40 (4/2/83)

Drill ahead from 3358m. Circulate at 3524m. POOH for short trip. Pick up stands and lay down singles. Drill ahead.

Drilling Day # 41 (5/2/83)

Drill ahead from 3524m. ROP decreased from 3528m to 3539m. Circulating off bottom; waiting on order. Pump slug and wiper trip to shoe. Circulate one bottom's up. Pump slug. POOH. Rig up Schlumberger. First run: DIL-SLS-GR. Second run: LDL-CNL-NGS.

Drilling Day # 42 (6/2/83)

Schlumberger logging: LDL-CNL-NGS. Rig up HDT; RIH and HDT logging. Rig up for Velocity Survey. RIH with Velocity survey. Rig up for RFT. Logging with RFT.

Drilling Day # 43 (7/2/83)

As Geoservices engineers were released from the rig, no records of activities from 7/2 to plug and abandon were included in this report.

36" PHASE

SUMMARY

The well was spudded in 254m of water at 01.00 hrs. on 27.12.82

Bit # 1 SMITH DSJ, 14 3/4" (3*16.) was used to perform a penetration test and jetted down to 283m.

Bit # 2 HUGHES 3AJ, 26" (3*28) + 36" (3*22) W/C was then jetted down to 276m and drilled ahead to 328m. A high viscous pill of 30 bbls was pumped at 300m and a survey showed 3/4 deg deviation. At 328m a high viscous pill of 50 bbls was pumped and a survey showed 1/2 deg deviation. A short trip was made and no overpull was recorded.

The hole was then circulated with seawater and then displaced with 175 bbls of high viscous mud prior to pulling out and running the 30" casing.

WOB/RPM/ROP PRACTICES

Two bits were used in this phase. Drilling time was 3.0 hours, with an average ROP of 18 m/hr. On bottom time was 15.3 hours including a round trip, a wiper trip and circulation time.

Drilling practice are summarized below.

DEPTH INTERVAL m	ROP m/hr	WOB klbs	RPM	FR gpm
254-283	11.0	20	0	0
276-328	19.3	2	100	980

HYDRAULICS

The flow rates and annular velocities must be kept high in this phase to remove the large quantity of cuttings generated by the drilling.

As can be seen from the cutting transport tables the parameters used during this phase were not sufficient in cleaning the hole all but the finest cuttings (below 1/4") were removed. However since this phase was very short the build up of cuttings in the hole was not serious. Gel pills were pumped during drilling aiding hole cleaning and once TD was reached the hole was flushed with sea water and displaced by 175 bbls of high viscous mud.

Bit efficiency was 28%, with a HP/sqin. value of 4.1.

CASING AND CEMENTATION

4 joints and a 4m well head housing of Vetco, 30" (1" wall) 310 ft/lbs casing were run in and set at (1073.53ft) 327.21m. A stinger was made up and run in. 1200 bbls of sea water were then pumped.

The following were then pumped :

- 1) 1150 sacks of class "G" cement at 15.8 ppg mixed with sea water
- 2) the cement was displaced by 22 bbls of sea water.

The top of good cement was estimated to be at the sea bed.

CUTTING TRANSPORT TABLES

The tables provide a quick look at hole cleaning and cuttings removal. By controlling the ROP, raising or lowering the flow rate or changing the rheological properties of the mud, one can decide the action necessary to provide the most efficient hole cleaning.

In the following tables the data has been calculated between DC and OH and also between DP and OH, with the specific flowrates and mud properties used over the selected interval. Cuttings sizes are in decimal inches.

The following is a brief explanation of the terms utilised :

V_s = slip velocity (ft/min)

V_c = annular velocity - slip velocity

C_f = cuttings generated at the bit
(gallons/gallon of mud)

C_a = cuttings in annulus
(gallons/gallon of mud)

R_{ct} = cuttings transport ratio (decimal percentage)
= cutting velocity/annular velocity

Interval: 900ft. to 1074ft.

ROP: 69.60 ft/hr.

Flow rate 980.0 gpm.

Ann.Vel: 19.92 ft/min (DC/OH)

MW: 8.7 ppg PV 2 YP 2

Gel (10 sec) 1 YP/PV 1.00

n = 0.737 K = 0.030

Cuttings Density: 2.50 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	102.99	-83.07			
1.250	85.82	-65.90			
1.000	68.66	-48.74			
0.750	51.49	-31.57			
0.500	34.33	-14.41			
0.250	17.16	2.76	0.1384	0.0626	0.4525
0.125	5.40	14.52	0.7288	0.0626	0.0859

Interval: 900ft. to 1074ft.

ROP: 69.60 ft/hr.

Flow rate 980.0 gpm.

Ann.Vel: 19.43 ft/min (DC/OH)

MW: 8.7 ppg PV 2 YP 2

Gel (10 sec) 1 YP/PV 1.00

n = 0.737 K = 0.030

Cuttings Density: 2.50 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	100.09	-80.66			
1.250	83.41	-63.97			
1.000	66.73	-47.29			
0.750	50.05	-30.61			
0.500	33.36	-13.93			
0.250	16.68	2.75	0.1416	0.0626	0.4421
0.125	5.10	14.33	0.7374	0.0626	0.0849

Interval: 900ft. to 1074ft.

ROP: 69.60 ft/hr.

Flow rate 980.0 gpm.

Ann.Vel: 18.90 ft/min (DP/OH)

MW: 8.7 ppg PV 2 YP 2

Gel (10 sec) 1 YP/PV 1.00

n = 0.737 K = 0.030

Cuttings Density: 2.50 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	96.26	-77.37			
1.250	80.22	-61.32			
1.000	64.18	-45.28			
0.750	48.13	-29.23			
0.500	32.09	-13.19			
0.250	16.04	2.85	0.1510	0.0626	0.4146
0.125	4.72	14.18	0.7502	0.0626	0.0835

GEO SERVICES T.D.C

Phillips Aust Co.

Selene # 1

30.12.82

CASING LIST

CASING SIZE: 30" TYPE: 1" wall WEIGHT(lbs/ft): 310

CASING LENGTH: 52.85
SHOE DEPTH : 327.20

```
*****  
* Jt # * LENGTH * TOTAL LENGTH * Depth From KB *      Remarks *  
*****  
*    1 * 12.23 *    12.23 *    314.97 * Shoe Joint *  
*    2 * 12.28 *    24.51 *    302.69 *           *  
*    3 * 12.10 *    36.61 *    290.59 *           *  
*    4 * 12.11 *    48.72 *    278.48 *           *  
*    5 *  4.13 *    52.85 *    274.35 * W/H housing *  
*****
```


26" PHASE

SUMMARY

The 26" hole was drilled from (1074ft) 328m to (1908ft) 589m with two bits.

Bit # 3 HUGHES OSC 3J, 26" (3*28), after drilling out the cement and shoe, drilled ahead to 464m, viscous pills were spotted every second single. At 464m a survey was dropped. The wire line however snapped and Bit # 3 was pulled out to retrieve the tool.

Bit # 3RR was run in and a second survey showed 1/2 deg deviation. This bit drilled ahead to 589m, again spotting viscous pills every second single. A survey at 589m showed 3/4 deg deviation. Circulating sea water, a short wiper trip and a high viscous slug was pumped to clean the hole before the 20" casing was run in.

WOB/RPM/ROP PRACTICE

The two bits drilled this phase in 5.0 hours with an average ROP of 52.2 m/hr. On bottom time was 19.3 hours, which included a round trip and circulating time.

Drilling practice are summarized below :

DEPTH INTERVAL m	ROP m/hr	WOB klbs	RPM	FR gpm
328-464	71.6	14.5	88	965
464-589	40.6	20.0	94	930

HYDRAULICS

As with the 36" phase, annular velocities must be kept high as large quantities of cuttings are generated by the drilling.

Again only the fine cuttings are moved using the drilling parameters of this phase. However pumping the high viscous slugs throughout the drilling and circulating at TD would ensure good hole cleaning.

Bit efficiency was very low 13%, with a HP/sqin value of 2.

CASING AND CEMENTING

26 joints of 20", Cameron X-56, 133 lb/ft casing were run in and

CASING AND CEMENTING /cont.

set at (1907.7ft) 581.47m. Prior to cementing 300 bbls of high viscous mud was circulated, chased by 550 bbls of sea water. The stinger assembly was made up and run in. The hole was then circulated with sea water.

The following were then pumped :

- 1) 5 blls of sea water, pre flush.
- 2) 1200 sacks of class "G" cement and 10.8 gal/sack of 2.5% pre-hydrated gel. Mixed with drill water and an average density of 12.4 ppg.
- 3) 500 sacks of class "G" cement neat. Mixed with sea water and an average density of 15.6 ppg.
- 4) The cement was displaced by 34 bbls of sea water.

The top of good cement was estimated to be at the sea bed.

CUTTING TRANSPORT TABLES

The tables provide a quick look at hole cleaning and cuttings removal. By controlling the ROP, raising or lowering the flow rate or changing the rheological properties of the mud, one can decide the action necessary to provide the most efficient hole cleaning.

In the following tables the data has been calculated between DC and OH and also between DP and OH, with the specific flowrates and mud properties used over the selected interval. Cuttings sizes are in decimal inches.

The following is a brief explanation of the terms utilised :

Vs = slip velocity (ft/min)

Vc = annular velocity - slip velocity

Cf = cuttings generated at the bit
(gallons/gallon of mud)

Ca = cuttings in annulus
(gallons/gallon of mud)

Rct = cuttings transport ratio (decimal percentage)
= cutting velocity/annular velocity

Interval: 1074ft. to 1908ft.

ROP: 166.80 ft/hr.

Flow rate 955.0 gpm.

Ann.Vel: 39.96 ft/min (DC/OH)

MW: 8.7 ppg PV 2 YP 2

Gel (10 sec) 1 YP/PV 1.00

n = 0.737 K = 0.030

Cuttings Density: 2.50 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	134.13	-.94.17			
1.250	122.44	-.82.48			
1.000	109.51	-.69.55			
0.750	74.44	-.34.48			
0.500	49.63	-.9.67			
0.250	24.81	15.15	0.3791	0.0803	0.2119
0.125	12.41	27.55	0.6895	0.0803	0.1165

Interval: 1074ft. to 1908ft.

ROP: 166.80 ft/hr.

Flow rate 955.0 gpm.

Ann.Vel: 38.00 ft/min (DC/OH)

MW: 8.7 ppg PV 2 YP 2

Gel (10 sec) 1 YP/PV 1.00

n = 0.737 K = 0.030

Cuttings Density: 2.50 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	134.13	-.96.13			
1.250	122.44	-.84.44			
1.000	109.51	-.71.51			
0.750	71.05	-.33.05			
0.500	47.37	-.9.37			
0.250	23.68	14.32	0.3768	0.0803	0.2132
0.125	11.84	26.16	0.6884	0.0803	0.1167

Interval: 1074ft. to 1908ft.

ROP: 166.80 ft/hr.

Flow rate 955.0 gpm.

Ann.Vel: 35.96 ft/min (DP/OH)

MW: 8.7 ppg PV 2 YP 2

Gel (10 sec) 1 YP/PV 1.00

n = 0.737 K = 0.030

Cuttings Density: 2.50 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	134.13	-.98.17			
1.250	122.44	-.86.49			
1.000	89.15	-.53.19			
0.750	66.86	-.30.90			
0.500	44.57	-.8.62			
0.250	22.29	13.67	0.3802	0.0803	0.2113
0.125	11.14	24.81	0.6901	0.0803	0.1164

 Phillips Aust Co. Selene # 1 BIT REPORT

BIT NO	TYPE	SIZE	NOZZLES	DEP. IN	MTRGE	DRLNG		AVER COST/M			WOB			HYDRO. POWER			Remarks	
						HOURS	T/E/G	M/HR	US \$	KLBS	RPM	FLOW	SPP	MW	TTL	BIT		/SI
3	HTC OSC 3J	26	26 26 26	328.0	136.0	1.90	0/0/0	71.6	397	14.5	88	965	1315	8.70	10544	1366	2.0	
3RR	HTC OSC 3J	26	26 26 26	464.0	126.0	3.10	0/0/0	40.6	503	20.0	94	930	1240	8.70	9582	1222	1.8	FOCH for 20" .csg

GEO SERVICES T.D.C

Phillips Aust Co.

Selene # 1

30.12.82

CASING LIST

CASING SIZE: 20"

TYPE: Cameron JV(X-56)

WEIGHT(lbs/ft): 133

CASING LENGTH: 306.00

SHOE DEPTH : 581.47

```
*****
* J.t # * LENGTH * TOTAL LENGTH * Depth From KB * Remarks *
*****
* 1 * 12.80 * 12.80 * 568.67 *Shoe Joint *
* 2 * 11.84 * 24.64 * 556.83 * *
* 3 * 11.91 * 36.55 * 544.92 * *
* 4 * 11.90 * 48.45 * 533.02 * *
* 5 * 11.91 * 60.36 * 521.11 * *
* 6 * 11.90 * 72.26 * 509.21 * *
* 7 * 11.86 * 84.12 * 497.35 * *
* 8 * 11.87 * 95.99 * 485.48 * *
* 9 * 11.90 * 107.89 * 473.58 * *
* 10 * 11.90 * 119.79 * 461.68 * *
* 11 * 11.90 * 131.69 * 449.78 * *
* 12 * 11.89 * 143.58 * 437.89 * *
* 13 * 11.91 * 155.49 * 425.98 * *
* 14 * 11.92 * 167.41 * 414.06 * *
* 15 * 11.91 * 179.32 * 402.15 * *
* 16 * 11.91 * 191.23 * 390.24 * *
* 17 * 11.91 * 203.14 * 378.33 * *
* 18 * 11.84 * 214.98 * 366.49 * *
* 19 * 11.92 * 226.90 * 354.57 * *
* 20 * 11.88 * 238.78 * 342.69 * *
* 21 * 11.86 * 250.64 * 330.83 * *
* 22 * 11.85 * 262.49 * 318.98 * *
* 23 * 11.93 * 274.42 * 307.05 * *
* 24 * 11.85 * 286.27 * 295.20 * *
* 25 * 11.80 * 298.07 * 283.40 *Crossover *
* 26 * 7.93 * 306.00 * 275.47 *Well Head *
*****
```

17 1/2" PHASE

SUMMARY

After extensive work on the BOP stack and the riser string the stack was eventually landed onto the well head and successfully tested to 5000 psi.

The BHA was made up with Bit # 1RR and run into the hole. Cement was tagged at 398m and the cement, float collar and casing shoe were drilled out with seawater.

After performing a LOT at 11.7 ppg, drilling commenced of the 17 1/2" hole.

Bit # 1RR, SMITH SDS 14 3/4" (3*22) and 17 1/2" under-reamer drilled from 590m to 848m. The hole was reamed at each kelly down. A survey at 747m showed 1 deg. deviation, and at 848m 3/4 deg. deviation. After circulating for 1 hour the bit was pulled out.

Bit # 4, SMITH SDS 14 3/4" (3*22) and 17 1/2" under-reamer drilled from 848m to 1268.5m. A survey at 1179m showed 1 deg. deviation and at 1268.5m 1/4 deg. deviation. At 1268.5m (13 3/8" casing point) the hole was conditioned with a wiper trip to the 20" casing shoe, followed by 2 hours of circulation.

After pulling out, Schlumberger was rigged up and the open hole logged. The logs run were:

GR-DIL, SLS, MSL.

WOB/RPM/ROP PRACTICE

The phase was completed using two bits. The total drilling time was 30.25 hours, giving an average ROP of 22.4 m/hr (73.5 ft/hr). The total bottom time was 48.3 hours, including circulation and trips. An average ROP throughout the entire phase was 14.0 m/hr (46.0 ft/hr).

Drilling practice can be summarized as follows:

DEPTH INTERVAL m	ROP m/hr	WOB klbs	RPM	FR gpm
590-848	34.3	37	115	1120
848-1268	18.5	40	112	1050

HYDRAULICS

Both bits were run with 3*22 nozzels. The average flow rate throughout the phase was 1085 gpm, giving an average bit power ratio of 28.5% (30% for Bit # 1RR and 27% for Bit # 4) and an average HP/sqin of 2.25. These values do not represent good bit efficiency and this reasoning could account for the apparently slow ROP values recorded in the top hole sediments of this phase.

The slower drilling rates and high flow rates however ensure good

HYDRAULICS cont/

hole cleaning, this fact can be noted by referring to the cuttings transport tables. With the resultant annular velocities in excess of 27 m/min (90 ft/min) between DP and OH, increasing to 30.5 m/min (100 ft/min) between DC and OH, cuttings upto 1" in diameter are removed from the hole.

These facts may have been assets in maintaining a clean bit, the soft marly matrix of the calcarenite sediments could have caused bit balling problems had the flow rates been lower and certainly hole cleaning and solids control would have deteriorated.

CASING AND CEMENTING

83 joints, 1 shoe joint and 1 casing hanger of 13 3/8" Buttress N-80, 72 lbs/ft. casing was run in the hole. The casing shoe was set at 1262m (4140.57 ft) and the casing hanger at 275.4m (903.44 ft) 1.73m (5.7 ft) below the 20" casing wellhead.

Prior to cementation the hole was cleaned and conditioned by circulating for 2 hours.

The following were then pumped:

- 1) 25 bbls of drill water to pre-flush the hole.
- 2) 825 sacks of class "G" cement mixed with seawater, 10.8 gal/sack of 2.5% pre-hydrated gel and 0.5% CFR-2 (powder) was added. The average density of the lead slurry was 12.8 ppg.
- 3) 500 sacks of class "G" cement mixed with drill water, 5 gal/sack of 0.1% HR-6L was added. The average density of the tail slurry was 15.6 ppg.
- 4) The cement was displaced by 490 bbls of drill mud.
- 5) The plug was bumped using a pressure of 1500 psi and held for 10 minutes (2.7 bbls bled back).

The top of good cement was estimated to be at 405.4m (1330 ft).

CUTTING TRANSPORT TABLES

The tables provide a quick look at hole cleaning and cuttings removal. By controlling the ROP, raising or lowering the flow rate or changing the rheological properties of the mud, one can decide the action necessary to provide the most efficient hole cleaning.

In the following tables the data has been calculated between DC and OH and also between DP and OH, with the specific flowrates and mud properties used over the selected interval. Cuttings sizes are in decimal inches.

The following is a brief explanation of the terms utilised :

V_s = slip velocity (ft/min)

V_c = annular velocity - slip velocity

C_f = cuttings generated at the bit
(gallons/gallon of mud)

C_a = cuttings in annulus
(gallons/gallon of mud)

R_{ct} = cuttings transport ratio (decimal percentage)
= cutting velocity/annular velocity

Interval: 2782ft. to 4140ft.

ROP: 59.69 ft/hr.

Flow rate 1050.0 gpm.

Ann.Vel: 104.54 ft/min (DC/OH)

MW: 9.1 ppg PV 2 YP 7 Gel (10 sec) 4 YP/PV 3.50
n = 0.485 K = 0.242

Cuttings Density: 2.45 (Calcarenita)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.000	103.42	1.11	0.0107	0.0118	1.1106
0.750	68.23	36.30	0.3473	0.0118	0.0341
0.500	45.49	59.05	0.5648	0.0118	0.0210
0.250	22.74	81.79	0.7824	0.0118	0.0151
0.125	11.37	93.16	0.8912	0.0118	0.0133

Interval: 2782ft. to 4140ft.

ROP: 60.36 ft/hr.

Flow rate 1050.0 gpm.

Ann.Vel: 91.50 ft/min (DP/OH)

MW: 9.1 ppg PV 2 YP 7 Gel (10 sec) 4 YP/PV 3.50
n = 0.485 K = 0.242

Cuttings Density: 2.45 (Calcarenita)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.000	81.29	10.21	0.1116	0.0120	0.1073
0.750	60.97	30.54	0.3337	0.0120	0.0359
0.500	40.65	50.86	0.5558	0.0120	0.0215
0.250	20.32	71.18	0.7779	0.0120	0.0154
0.125	10.16	81.34	0.8890	0.0120	0.0135

Interval: 1909ft. to 2782ft.

ROP: 116.40 ft/hr.

Flow rate 120.0 gpm.

Ann.Vel: 111.50 ft/min (DC/OH)

MW: 9.0 ppg

PV 3

YP 7

Gel (10 sec) 5

YP/PV 2.33

n = 0.678

K = 0.073

Cuttings Density: 2.45 (Calcarenite)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.000	104.45	7.05	0.0633	0.0217	0.3423
0.750	68.70	42.80	0.3839	0.0217	0.0564
0.500	45.80	65.70	0.5892	0.0217	0.0367
0.250	22.90	88.60	0.7946	0.0217	0.0272
0.125	11.45	100.05	0.8973	0.0217	0.0241

Interval: 1909ft. to 2782ft.

ROP: 116.40 ft/hr.

Flow rate 120.0 gpm.

Ann.Vel: 97.60 ft/min (DP/OH)

MW: 9.0 ppg

PV 3

YP 7

Gel (10 sec) 5

YP/PV 2.33

n = 0.678

K = 0.073

Cuttings Density: 2.45 (Calcarenite)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.000	81.49	16.11	0.1651	0.0217	0.1312
0.750	61.12	36.49	0.3738	0.0217	0.0579
0.500	40.75	56.86	0.5825	0.0217	0.0372
0.250	20.37	77.23	0.7913	0.0217	0.0274
0.125	10.19	87.42	0.8956	0.0217	0.0242

GEO SERVICES T.D.C

Phillips Aust Co.

Selene # 1

12.1.83

CASING LIST

CASING SIZE: 13 3/8

TYPE: Buttress,N-80

WEIGHT(lbs/ft): 72

CASING LENGTH: 986.59

SHOE DEPTH : 1262.00

```
*****
* Jt # * LENGTH * TOTAL LENGTH * Depth From KB * Remarks *
*****
* 1 * 12.80 * 12.80 * 1249.20 *Shoe Joint *
* 2 * 11.28 * 24.08 * 1237.92 * *
* 3 * 10.57 * 34.65 * 1227.35 *Centralizer *
* 4 * 11.45 * 46.10 * 1215.90 * *
* 5 * 12.01 * 58.11 * 1203.89 *Centralizer *
* 6 * 11.62 * 69.73 * 1192.27 * *
* 7 * 11.92 * 81.65 * 1180.35 *Centralizer *
* 8 * 11.56 * 93.21 * 1168.79 * *
* 9 * 11.62 * 104.83 * 1157.17 *Centralizer *
* 10 * 11.70 * 116.53 * 1145.47 * *
* 11 * 11.59 * 128.12 * 1133.88 * *
* 12 * 11.88 * 140.00 * 1122.00 *Centralizer *
* 13 * 11.77 * 151.77 * 1110.23 * *
* 14 * 11.78 * 163.55 * 1098.45 * *
* 15 * 11.72 * 175.27 * 1086.73 * *
* 16 * 11.99 * 187.26 * 1074.74 * *
* 17 * 11.67 * 198.93 * 1063.07 * *
* 18 * 11.69 * 210.62 * 1051.38 * *
* 19 * 11.75 * 222.37 * 1039.63 * *
* 20 * 11.93 * 234.30 * 1027.70 * *
* 21 * 11.76 * 246.06 * 1015.94 * *
* 22 * 11.66 * 257.72 * 1004.28 * *
* 23 * 11.83 * 269.55 * 992.45 * *
* 24 * 12.04 * 281.59 * 980.41 * *
* 25 * 11.87 * 293.46 * 968.54 * *
* 26 * 11.64 * 305.10 * 956.90 * *
* 27 * 11.52 * 316.62 * 945.38 * *
* 28 * 11.81 * 328.43 * 933.57 * *
* 29 * 11.89 * 340.32 * 921.68 * *
* 30 * 11.67 * 351.99 * 910.01 * *
* 31 * 11.75 * 363.74 * 898.26 * *
* 32 * 11.43 * 375.17 * 886.83 * *
* 33 * 11.34 * 386.51 * 875.49 * *
* 34 * 12.06 * 398.57 * 863.43 * *
* 35 * 11.57 * 410.14 * 851.86 * *
* 36 * 11.95 * 422.09 * 839.91 * *
* 37 * 11.96 * 434.05 * 827.95 * *
* 38 * 11.56 * 445.61 * 816.39 * *
* 39 * 11.50 * 457.11 * 804.89 * *
* 40 * 11.70 * 468.81 * 793.19 * *
```

GEOSERVICES T.D.C

Phillips Aust Co.

Selene # 1

12.1.83

CASING LIST

CASING SIZE: 13 3/8

TYPE: Buttress,N-80

WEIGHT(lbs/ft): 72

CASING LENGTH: 986.59

SHOE DEPTH : 1262.00

```
*****
* Jt # * LENGTH * TOTAL LENGTH * Depth From KB *      Remarks      *
*****
* 41 * 11.62 * 480.43 * 781.57 *
* 42 * 11.59 * 492.02 * 769.98 *
* 43 * 11.55 * 503.57 * 758.43 *
* 44 * 11.60 * 515.17 * 746.83 *
* 45 * 11.27 * 526.44 * 735.56 *
* 46 * 11.64 * 538.08 * 723.92 *
* 47 * 11.32 * 549.40 * 712.60 *
* 48 * 11.73 * 561.13 * 700.87 *
* 49 * 12.06 * 573.19 * 688.81 *
* 50 * 11.45 * 584.64 * 677.36 *
* 51 * 11.71 * 596.35 * 665.65 *
* 52 * 11.79 * 608.14 * 653.86 *
* 53 * 11.87 * 620.01 * 641.99 *
* 54 * 11.54 * 631.55 * 630.45 *
* 55 * 11.89 * 643.44 * 618.56 *
* 56 * 11.92 * 655.36 * 606.64 *
* 57 * 11.91 * 667.27 * 594.73 *
* 58 * 11.70 * 678.97 * 583.03 *
* 59 * 11.83 * 690.80 * 571.20 *
* 60 * 11.51 * 702.31 * 559.69 *Centralizer
* 61 * 11.62 * 713.93 * 548.07 *Centralizer
* 62 * 11.51 * 725.44 * 536.56 *
* 63 * 11.55 * 736.99 * 525.01 *
* 64 * 11.88 * 748.87 * 513.13 *
* 65 * 11.75 * 760.62 * 501.38 *
* 66 * 12.07 * 772.69 * 489.31 *
* 67 * 11.87 * 784.56 * 477.44 *
* 68 * 11.69 * 796.25 * 465.75 *
* 69 * 11.90 * 808.15 * 453.85 *
* 70 * 11.76 * 819.91 * 442.09 *
* 71 * 11.94 * 831.85 * 430.15 *
* 72 * 11.27 * 843.12 * 418.88 *
* 73 * 11.70 * 854.82 * 407.18 *
* 74 * 11.79 * 866.61 * 395.39 *
* 75 * 11.69 * 878.30 * 383.70 *
* 76 * 11.65 * 889.95 * 372.05 *
* 77 * 11.58 * 901.53 * 360.47 *
* 78 * 11.68 * 913.21 * 348.79 *
* 79 * 11.87 * 925.08 * 336.92 *
* 80 * 11.96 * 937.04 * 324.96 *
*****
```

GEOSERVICES T.D.C

Phillips Aust Co.

Selene # 1

12.1.83

CASING LIST

CASING SIZE: 13 3/8

TYPE: Buttress,N-80

WEIGHT(lbs/ft): 72

CASING LENGTH: 986.59

SHOE DEPTH : 1262.00

```
*****
* Jt # * LENGTH * TOTAL LENGTH * Depth From KB * Remarks *
*****
* 81 * 11.22 * 948.26 * 313.74 * *
* 82 * 11.60 * 959.86 * 302.14 * *
* 83 * 11.70 * 971.56 * 290.44 * *
* 84 * 12.01 * 983.57 * 278.43 * *
* 85 * 3.02 * 986.59 * 275.41 *Hanger *
*****
```

GEOSERVICES T.D.C.

12 1/4" PHASE

SUMMARY

After having landed the stack on the well head, the BOP's were successfully tested at 5000 psi. Bit # 5 and the 12 1/4" BHA were made up and run in the hole. The cement was tagged at 1247.2 m and drilled. After performing a LOT, drilling 12 1/4" hole started.

9 bits were used to drill from 1268 m down to 2898 m.

Bit # 5, SMITH SDS, tagged cement at 1247.2m. It drilled out cement, float collar and casing shoe, then drilled from 1268m to 1596m. A significant drop in torque occurred at 1494m. ROP slowed down. A survey was dropped at 1572 m, showing 1/2 deg.

Bit # 6, REED HS51, drilled from 1596m to 1612m. ROP was high (>9/10 mn/m). The bit was unsuitable for the kind of formation encountered and was pulled out.

Bit # 7, SMITH SDS, drilled from 1612m to 1789m. Trip gas was 0.3%. At 1640m a drilling break occurred. The Totco deviation survey at 1789m was 1 deg.

Bit # 8, SMITH SDT, drilled from 1789m to 1916m. Overpull of 30 to 40 klbs occurred at pipe connections 1829m, 1838m, 1855m. Drilling was stopped 14 hours because of Union meeting. Drilling resumed but a loss of pressure was noticed. Then 35000 lbs were lost in drill string weight. The fish was picked up without problems.

Bit # 9, SMITH SDT, drilled from 1916m to 2047m. It had to be pulled out because of a pressure loss due to a wash out. Also torque increased at 2040m.

Trip gas was 0.4% and the Totco deviation survey at 2047m was 1 deg.

Bit # 10, SMITH SDGH, drilled from 2047m to 2116m. The ROP was quite slow. The bit had to be pulled out because of a wash out. Trip gas was 0.2%.

Bit # 11, SMITH SDT, drilled from 2116m to 2215m. Again this bit had to be pulled out because of a wash out. The drill collar were checked and a few had to be laid down. Trip gas was 0.35 %

Bit # 12, SMITH SDGH, drilled from 2215m to 2618m. Trip gas of 0.4 % was recorded. A survey at 2372m showed 1/2 deg. and another one at 2618m 1/2 deg.

Bit # 13, SMITH SDT, drilled from 2618m down to casing depth: 2898m. Trip gas was 2%. A survey at 2898m gave a reading of 1/2 deg.

The casing depth was approximately 298 meters deeper than the theoretical one. This was due to the more important thickness of Gippsland limestone and Upper Lakes Entrance formation.

The hole was conditioned with a wiper trip. After pulling out, Schlumberger logs were performed. The Logs were: DIL, SLS, GR/LDL, CNL/HDT. A side wall coring was performed; On 51 shots, 100% were recovered.

The 9 5/8" casing was then run and cemented. The casing shoe depth: 2875m.

WOB/RPM/ROP PRACTICE

9 bits were used to complete the 12 1/4" phase. The total drilling time was 149 hours, giving an average ROP of 11 m/h (5.45 mn/m). The total bottom time was 185 hours (without including trip time).

Drilling practice can be summarized in the two following tables. One gives the average drilling parameters versus bits. The other one, versus depth intervals.

VS BITS	ROP	WOB	RPM	FR
	m/h	klbs		gpm

BIT # 5	4.48	44	119	662
BIT # 6	11.90	43	108	643
BIT # 7	7.40	45	120	640
BIT # 8	7.00	52	116	627
BIT # 9	6.70	60	108	639
BIT # 10	9.40	58	107	651
BIT # 11	8.00	51	117	664
BIT # 12	4.60	47	117	646
BIT # 13	3.60	48	117	633

VS DEPTH INTERVALS	ROP	WOB	RPM	FR
meters	m/h	klbs		gpm

From 1268 to 1525m	2/5	40/45	120	662
From 1525 to 1629m	5/10	40/45	120	662
From 1629 to 1656m	2/5	45/50	126	650
From 1656 to 1788m	5/15	40/50	118	640
From 1788 to 1918m	5/10	50/60	118	640
From 1918 to 2000m	3/6	55/60	110	640
From 2000 to 2167m	5/15	50/60	110	650
From 2167 to 2184m	2/5	55	115	660
From 2184 to 2392m	5/10	50	120	660
From 2392 to 2821m	2/5	50	117	650
From 2821 to 2843m	10/15	50	120	648
From 2843 to 2898m	.5/2	50	115	640

HYDRAULICS

The mud type used during this phase was a seawater gel polymere. The mud had a weight ranging from 9.3 to 9.4 ppg, a funnel viscosity from 40 to 47, a plastic viscosity from 8 to 15, a yield point from 10 to 15.

BIT # 5 was fitted with 3*14/32 jets. The average flow was 663 gpm. The bit hydraulic horsepower ratio (HHP) resulting was 66.6%, 6.1 HP/sq.in. The flow resulting was laminar, providing a good transport of cuttings.

BIT # 6 had also 3*14/32 jets. Flow rate was 643 gpm. The hydraulic characteristics were the same as bit # 5, but this type of bit was unsuitable for the type of formation drilled.

BIT # 7 was run with 3*14/32 jets and a 640 gpm flow. The bit HHP ratio was 65 % and 5.98 HP/sq.in. The flow resulting was laminar.

BIT # 8 was run with 2*14 and 1*15/32 jets. An average flow rate of 627 gpm resulted in a bit HHP ratio of 61 % (4.71 HP/sq.in). The flow was turbulent in the section DC 7 1/2"-Open hole., laminar above, thus providing a good cleaning and then a good transport of the cuttings. The bit was pulled out prematurely because of a wash out.

BIT # 9 was fitted like Bit # 8. A flow of 640 gpm gave a HHP ratio of 59 % (5.0 HP/sq.in). A turbulent flow resulted in th open hole and pipe-casing annulus. As for bit # 8, this bit was pulled out because of a wash out.

BIT # 10 had 2 jets of 15/32 and one of 14/32. A flow of 665 gpm was applied. The bit HHP ratio was thus 56 % (5.1 HP/sq.in), and a turbulent flow resulted thorough the annulus. The bit was pulled out prematurely because of a wash out.

BIT # 11 was fitted like bit # 10. The average flow rate was 664 gpm. The resulting bit HHP ratio was 57 %, lower again than the optimum. The flow in the annulus was turbulent. Again a wash out shortened the bit life.

BIT # 12 had 2*15+1*14/32 jets. The average flow was 646 gpm. The bit HHP ratio resulting was 55 % (4.7 HP/sq.in) lower than optimum. The flow was turbulent in the annulus.

BIT # 13 had also 2*15+1*14/32 jets. A 632 gpm flow was applied, giving a HHP ratio of 54 % (4.42 HP/sq.in). Same type of flow as previously: turbulent.

For bits 9 to 13, a turbulent flow type, even resulting in a lower bit efficiency was preferred to assure a better cleaning of the hole. This was well justified as interbeds of shaly and sticky formations were drilled.

CASING

CASING

220 joints of 9 5/8" casing, type Buttress, grade L-80, were run. The casing shoe was set at 2875.7m.

24 centralizers were located at: (feet) 9493, 9244, 9020, 8831, 8642, 8452, 8264, 8036, 7810, 7624, 7434, 7208, 7017, 6830, 6641, 6417, 6226, 6032, 5843, 5653, 5460, 5229, 5037, 4848.

CEMENTATION

1300 sacks of class G cement were used.

The pre-flush was 50 bbls of drillwater

The lead slurry was 800 sacks of class G cement at 12.8 ppg, mixed with drillwater.

Additives were : 2.5 % PREHYD. GEL @ 9.0 lbs/bbl Bentonite.

0.5% CFR-2 @ 1.8 lbs/bbl.

0.06 % HR-6L @ 0.02 gal/bbl.

The tail slurry was 500 sacks ok class G cement at 15.8 ppg, mixed with drillwater.

Additives were : 0.5 % CFR-2 @ 4.0 lbs/bbl.

0.8 % HALAD 22A @ 6.3 lbs/bbl.

0.1 % HR-6L @ 0.8 % gal/bbl.

The displacement was made with 165 bbls of drillwater and 619 bbls of mud.

A plug was bumped.

The estimated top of good cement was estimated at 3840ft (1170m).

A pressure of 3000 psi was held for 10 mn.

The procedure for the cementation was as follows:

05h40 : btm plug away.

05h45 : start mixing @ 12.8 ppg.

07h05 : finished mixing @ 15.8 ppg.

07h30 : top plug away; pressure required: 3300 psi.

07h30 : start displacement.

08h15 : bumped plug. Barrels bled back : 2 bbls.

Remarks: The last 135 bbls of displacement mud were lost.

CUTTING TRANSPORT TABLES

The tables provide a quick look at hole cleaning and cuttings removal. By controlling the ROP, raising or lowering the flow rate or changing the rheological properties of the mud, one can decide the action necessary to provide the most efficient hole cleaning.

In the following tables the data has been calculated between DC and OH and also between DP and OH, with the specific flowrates and mud properties used over the selected interval. Cuttings sizes are in decimal inches.

The following is a brief explanation of the terms utilised :

V_s = slip velocity (ft/min)

V_c = annular velocity - slip velocity

C_f = cuttings generated at the bit
(gallons/gallon of mud)

C_a = cuttings in annulus
(gallons/gallon of mud)

R_{ct} = cuttings transport ratio (decimal percentage)
= cutting velocity/annular velocity

Interval: 4159ft. to 5002ft.

ROP: 48.45 ft/hr.

Flow rate 662.0 gpm.

Ann.Vel: 180.28 ft/min (DC/OH)

MW: 9.1 ppg PV 9 YP 13 Gel (10 sec) 4 YP/PV 1.44

n = 0.585 K = 0.469

Cuttings Density: 2.65 (Calcarenite)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	135.66	44.62	0.2475	0.0075	0.0302
1.250	123.84	56.44	0.3131	0.0075	0.0239
1.000	110.77	69.52	0.3856	0.0075	0.0194
0.750	95.93	84.36	0.4679	0.0075	0.0160
0.500	59.67	120.62	0.6690	0.0075	0.0112
0.250	29.83	150.45	0.8345	0.0075	0.0090
0.125	14.92	165.37	0.9173	0.0075	0.0081

Interval: 5002ft. to 5343ft.

ROP: 27.95 ft/hr.

Flow rate 662.0 gpm.

Ann.Vel: 180.28 ft/min (DC/OH)

MW: 9.2 ppg PV 9 YP 13 Gel (10 sec) 4 YP/PV 1.44

n = 0.585 K = 0.469

Cuttings Density: 2.65 (Calcarenite)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	134.40	45.88	0.2545	0.0043	0.0169
1.250	122.69	57.59	0.3195	0.0043	0.0135
1.000	109.74	70.54	0.3913	0.0043	0.0110
0.750	95.04	85.25	0.4728	0.0043	0.0091
0.500	59.15	121.14	0.6719	0.0043	0.0064
0.250	29.57	150.71	0.8360	0.0043	0.0052
0.125	14.79	165.50	0.9180	0.0043	0.0047

Interval: 5431ft. to 6291ft.

ROP: 25.21 ft/hr.

Flow rate 640.0 gpm.

Ann.Vel: 174.29 ft/min (DC/OH)

MW: 9.4 ppg PV 10 YP 10 Gel (10 sec) 2 YP/PV 1.00

n = 0.637 K = 0.338

Cuttings Density: 2.65 (Calcarenite)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	131.93	42.36	0.2430	0.0040	0.0165
1.250	120.44	53.86	0.3090	0.0040	0.0130
1.000	107.72	66.57	0.3819	0.0040	0.0105
0.750	93.29	81.00	0.4648	0.0040	0.0087
0.500	76.17	98.12	0.5630	0.0040	0.0071
0.250	31.58	142.71	0.8188	0.0040	0.0049
0.125	15.79	158.50	0.9094	0.0040	0.0044

Interval: 7845ft. to 9252ft.

ROP: 55.97 ft/hr.

Flow rate 650.0 gpm.

Ann.Vel: 177.02 ft/min (DC/OH)

MW: 9.4 ppg PV 11 YP 12 Gel (10 sec) 8 YP/PV 1.09

n = 0.794 K = 0.106

Cuttings Density: 2.67 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	132.79	44.22	0.2498	0.0088	0.0352
1.250	121.22	55.79	0.3152	0.0088	0.0279
1.000	108.43	68.59	0.3875	0.0088	0.0227
0.750	93.90	83.12	0.4695	0.0088	0.0187
0.500	57.42	119.60	0.6756	0.0088	0.0130
0.250	28.71	148.31	0.8378	0.0088	0.0105
0.125	14.35	162.66	0.9189	0.0088	0.0096

Interval: 7845ft. to 9252ft.

ROP: 55.97 ft/hr.

Flow rate 650.0 gpm.

Ann.Vel: 177.02 ft/min (DC/OH)

MW: 9.4 ppg PV 11 YP 12 Gel (10 sec) 8 YP/PV 1.09

n = 0.794 K = 0.106

Cuttings Density: 2.70 (Shale)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	134.08	42.94	0.2426	0.0088	0.0362
1.250	122.40	54.62	0.3086	0.0088	0.0285
1.000	109.47	67.54	0.3816	0.0088	0.0230
0.750	94.81	82.21	0.4644	0.0088	0.0189
0.500	58.16	118.85	0.6714	0.0088	0.0131
0.250	29.08	147.94	0.8357	0.0088	0.0105
0.125	14.54	162.48	0.9179	0.0088	0.0096

Interval: 9325ft. to 9505ft.

ROP: 118.42 ft/hr.

Flow rate 640.0 gpm.

Ann.Vel: 174.29 ft/min (DC/OH)

MW: 9.4 ppg PV 8 YP 14 Gel (10 sec) 8 YP/PV 1.75

n = 0.652 K = 0.240

Cuttings Density: 2.67 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	132.79	41.50	0.2381	0.0189	0.0793
1.250	121.22	53.07	0.3045	0.0189	0.0620
1.000	108.43	65.87	0.3779	0.0189	0.0500
0.750	93.90	80.39	0.4613	0.0189	0.0410
0.500	55.74	118.55	0.6802	0.0189	0.0278
0.250	27.87	146.42	0.8401	0.0189	0.0225
0.125	13.93	160.36	0.9200	0.0189	0.0205

Interval: 9325ft. to 9505ft.

ROP: 118.42 ft/hr.

Flow rate 640.0 gpm.

Ann.Vel: 174.29 ft/min (DC/OH)

MW: 9.4 ppg PV 8 YP 14 Gel.(10 sec) 8 YP/PV 1.75

n = 0.652 K = 0.240

Cuttings Density: 2.70 (Shale)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	134.08	40.21	0.2307	0.0189	0.0819
1.250	122.40	51.90	0.2978	0.0189	0.0634
1.000	109.47	64.82	0.3719	0.0189	0.0508
0.750	94.81	79.48	0.4560	0.0189	0.0414
0.500	56.46	117.83	0.6761	0.0189	0.0279
0.250	28.23	146.06	0.8380	0.0189	0.0225
0.125	14.11	160.18	0.9190	0.0189	0.0206

GEOSERVICES T.D.C

PHILLIPS A. O. Co

SELENE # 1

28/1/83

CASING LIST

CASING SIZE: 9 5/8

TYPE: BUTTRESS L-80

WEIGHT(lbs/ft): 47

CASING LENGTH: 8533.51

SHOE DEPTH : 9435.56

* Jt #	* LENGTH	* TOTAL LENGTH	* Depth From KB	* Remarks
*	1.96	1.96	9433.60	*Casing shoe
*	76.49	78.45	9357.11	*Shoe Jt
*	1.75	80.20	9355.36	*Float collar
1	39.02	119.22	9316.34	*
2	37.97	157.19	9278.37	*
3	38.65	195.84	9239.72	*
4	38.62	234.46	9201.10	*
5	37.93	272.39	9163.17	*
6	37.73	310.12	9125.44	*
7	38.38	348.50	9087.06	*
8	35.98	384.48	9051.08	*
9	37.67	422.15	9013.41	*
10	39.06	461.21	8974.35	*
11	36.64	497.85	8937.71	*
12	37.71	535.56	8900.00	*
13	38.54	574.10	8861.46	*
14	38.29	612.39	8823.17	*
15	38.60	650.99	8784.57	*
16	38.81	689.80	8745.76	*
17	37.89	727.69	8707.87	*
18	38.38	766.07	8669.49	*
19	38.26	804.33	8631.23	*
20	38.78	843.11	8592.45	*
21	39.04	882.15	8553.41	*
22	39.10	921.25	8514.31	*
23	38.18	959.43	8476.13	*
24	38.91	998.34	8437.22	*
25	38.47	1036.81	8398.75	*
26	37.67	1074.48	8361.08	*
27	38.66	1113.14	8322.42	*
28	38.69	1151.83	8283.73	*
29	39.15	1190.98	8244.58	*
30	39.40	1230.38	8205.18	*
31	37.88	1268.26	8167.30	*
32	38.55	1306.81	8128.75	*
33	38.29	1345.10	8090.46	*
34	37.80	1382.90	8052.66	*
35	38.10	1421.00	8014.56	*
36	39.04	1460.04	7975.52	*
37	38.38	1498.42	7937.14	*

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CASING LIST

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TYPE: BUTTRESS L-80

WEIGHT(lbs/ft): 47

CASING LENGTH: 8533.51

SHOE DEPTH : 9435.56

* Jt #	* LENGTH	* TOTAL LENGTH	* Depth From KB	* Remarks	*

* 38	* 38.79	* 1537.21	* 7898.35	*	*
* 39	* 39.05	* 1576.26	* 7859.30	*	*
* 40	* 38.44	* 1614.70	* 7820.86	*	*
* 41	* 37.68	* 1652.38	* 7783.18	*	*
* 42	* 39.63	* 1692.01	* 7743.55	*	*
* 43	* 38.27	* 1730.28	* 7705.28	*	*
* 44	* 37.72	* 1768.00	* 7667.56	*	*
* 45	* 38.82	* 1806.82	* 7628.74	*	*
* 46	* 38.78	* 1845.60	* 7589.96	*	*
* 47	* 38.54	* 1884.14	* 7551.42	*	*
* 48	* 38.49	* 1922.63	* 7512.93	*	*
* 49	* 38.93	* 1961.56	* 7474.00	*	*
* 50	* 38.02	* 1999.58	* 7435.98	*	*
* 51	* 38.43	* 2038.01	* 7397.55	*	*
* 52	* 38.38	* 2076.39	* 7359.17	*	*
* 53	* 38.62	* 2115.01	* 7320.55	*	*
* 54	* 38.20	* 2153.21	* 7282.35	*	*
* 55	* 38.83	* 2192.04	* 7243.52	*	*
* 56	* 38.78	* 2230.82	* 7204.74	*	*
* 57	* 38.31	* 2269.13	* 7166.43	*	*
* 58	* 38.80	* 2307.93	* 7127.63	*	*
* 59	* 37.62	* 2345.55	* 7090.01	*	*
* 60	* 37.75	* 2383.30	* 7052.26	*	*
* 61	* 37.40	* 2420.70	* 7014.86	*	*
* 62	* 37.53	* 2458.23	* 6977.33	*	*
* 63	* 38.55	* 2496.78	* 6938.78	*	*
* 64	* 37.22	* 2534.00	* 6901.56	*	*
* 65	* 37.90	* 2571.90	* 6863.66	*	*
* 66	* 37.00	* 2608.90	* 6826.66	*	*
* 67	* 39.80	* 2648.70	* 6786.86	*	*
* 68	* 37.53	* 2686.23	* 6749.33	*	*
* 69	* 39.29	* 2725.52	* 6710.04	*	*
* 70	* 38.22	* 2763.74	* 6671.82	*	*
* 71	* 37.50	* 2801.24	* 6634.32	*	*
* 72	* 37.48	* 2838.72	* 6596.84	*	*
* 73	* 38.86	* 2877.58	* 6557.98	*	*
* 74	* 38.86	* 2916.44	* 6519.12	*	*
* 75	* 38.69	* 2955.13	* 6480.43	*	*
* 76	* 37.80	* 2992.93	* 6442.63	*	*
* 77	* 37.43	* 3030.36	* 6405.20	*	*

GEOSERVICES T.D.C

PHILLIPS A. O. Co

SELENE # 1

28/1/83

CASING LIST

CASING SIZE: 9 5/8

TYPE: BUTTRESS L-80

WEIGHT(lbs/ft): 47

CASING LENGTH: 8533.51

SHOE DEPTH : 9435.56

* Jt # *	* LENGTH *	* TOTAL LENGTH *	* Depth From KB *	* Remarks *
* 78 *	* 38.65 *	* 3069.01 *	* 6366.55 *	* *
* 79 *	* 37.72 *	* 3106.73 *	* 6328.83 *	* *
* 80 *	* 38.70 *	* 3145.43 *	* 6290.13 *	* *
* 81 *	* 37.65 *	* 3183.08 *	* 6252.48 *	* *
* 82 *	* 38.96 *	* 3222.04 *	* 6213.52 *	* *
* 83 *	* 38.73 *	* 3260.77 *	* 6174.79 *	* *
* 84 *	* 37.78 *	* 3298.55 *	* 6137.01 *	* *
* 85 *	* 39.25 *	* 3337.80 *	* 6097.76 *	* *
* 86 *	* 38.47 *	* 3376.27 *	* 6059.29 *	* *
* 87 *	* 38.30 *	* 3414.57 *	* 6020.99 *	* *
* 88 *	* 38.53 *	* 3453.10 *	* 5982.46 *	* *
* 89 *	* 38.84 *	* 3491.94 *	* 5943.62 *	* *
* 90 *	* 36.95 *	* 3528.89 *	* 5906.67 *	* *
* 91 *	* 37.83 *	* 3566.72 *	* 5868.84 *	* *
* 92 *	* 37.90 *	* 3604.62 *	* 5830.94 *	* *
* 93 *	* 38.59 *	* 3643.21 *	* 5792.35 *	* *
* 94 *	* 38.00 *	* 3681.21 *	* 5754.35 *	* *
* 95 *	* 39.07 *	* 3720.28 *	* 5715.28 *	* *
* 96 *	* 37.24 *	* 3757.52 *	* 5678.04 *	* *
* 97 *	* 37.79 *	* 3795.31 *	* 5640.25 *	* *
* 98 *	* 38.55 *	* 3833.86 *	* 5601.70 *	* *
* 99 *	* 39.02 *	* 3872.88 *	* 5562.68 *	* *
* 100 *	* 38.53 *	* 3911.41 *	* 5524.15 *	* Centralizer *
* 101 *	* 37.90 *	* 3949.31 *	* 5486.25 *	* *
* 102 *	* 37.63 *	* 3986.94 *	* 5448.62 *	* *
* 103 *	* 38.60 *	* 4025.54 *	* 5410.02 *	* *
* 104 *	* 39.64 *	* 4065.18 *	* 5370.38 *	* *
* 105 *	* 38.68 *	* 4103.86 *	* 5331.70 *	* Centralizer *
* 106 *	* 38.74 *	* 4142.60 *	* 5292.96 *	* *
* 107 *	* 39.58 *	* 4182.18 *	* 5253.38 *	* *
* 108 *	* 39.78 *	* 4221.96 *	* 5213.60 *	* *
* 109 *	* 38.50 *	* 4260.46 *	* 5175.10 *	* *
* 110 *	* 38.92 *	* 4299.38 *	* 5136.18 *	* Centralizer *
* 111 *	* 39.36 *	* 4338.74 *	* 5096.82 *	* *
* 112 *	* 38.62 *	* 4377.36 *	* 5058.20 *	* *
* 113 *	* 39.45 *	* 4416.81 *	* 5018.75 *	* *
* 114 *	* 38.53 *	* 4455.34 *	* 4980.22 *	* *
* 115 *	* 39.00 *	* 4494.34 *	* 4941.22 *	* *
* 116 *	* 38.61 *	* 4532.95 *	* 4902.61 *	* Centralizer *
* 117 *	* 39.24 *	* 4572.19 *	* 4863.37 *	* *

GEOSERVICES T.D.C

PHILLIPS A. O. Co

SELENE # 1

28/1/83

CASING LIST

CASING SIZE: 9 5/8

TYPE: BUTTRESS L-80

WEIGHT(lbs/ft): 47

CASING LENGTH: 8533.51

SHOE DEPTH : 9435.56

* Jt #	* LENGTH	* TOTAL LENGTH	* Depth From KB	*	Remarks	*

* 118	* 38.69	* 4610.88	* 4824.68	*		*
* 119	* 39.16	* 4650.04	* 4785.52	*		*
* 120	* 39.58	* 4689.62	* 4745.94	*		*
* 121	* 38.76	* 4728.38	* 4707.18	*	*Centralizer	*
* 122	* 38.16	* 4766.54	* 4669.02	*		*
* 123	* 38.56	* 4805.10	* 4630.46	*		*
* 124	* 39.17	* 4844.27	* 4591.29	*		*
* 125	* 37.40	* 4881.67	* 4553.89	*		*
* 126	* 38.35	* 4920.02	* 4515.54	*	*Centralizer	*
* 127	* 38.23	* 4958.25	* 4477.31	*		*
* 128	* 38.64	* 4996.89	* 4438.67	*		*
* 129	* 37.42	* 5034.31	* 4401.25	*		*
* 130	* 38.07	* 5072.38	* 4363.18	*		*
* 131	* 38.77	* 5111.15	* 4324.41	*	*Centralizer	*
* 132	* 39.17	* 5150.32	* 4285.24	*		*
* 133	* 39.30	* 5189.62	* 4245.94	*		*
* 134	* 40.01	* 5229.63	* 4205.93	*		*
* 135	* 38.07	* 5267.70	* 4167.86	*		*
* 136	* 38.34	* 5306.04	* 4129.52	*	*Centralizer	*
* 137	* 38.06	* 5344.10	* 4091.46	*		*
* 138	* 37.69	* 5381.79	* 4053.77	*		*
* 139	* 39.36	* 5421.15	* 4014.41	*		*
* 140	* 39.44	* 5460.59	* 3974.97	*		*
* 141	* 37.31	* 5497.90	* 3937.66	*	*Centralizer	*
* 142	* 38.30	* 5536.20	* 3899.36	*		*
* 143	* 38.26	* 5574.46	* 3861.10	*		*
* 144	* 37.75	* 5612.21	* 3823.35	*		*
* 145	* 37.85	* 5650.06	* 3785.50	*		*
* 146	* 37.41	* 5687.47	* 3748.09	*		*
* 147	* 37.93	* 5725.40	* 3710.16	*	*Centralizer	*
* 148	* 38.68	* 5764.08	* 3671.48	*		*
* 149	* 37.80	* 5801.88	* 3633.68	*		*
* 150	* 39.30	* 5841.18	* 3594.38	*		*
* 151	* 38.80	* 5879.98	* 3555.58	*		*
* 152	* 37.78	* 5917.76	* 3517.80	*	*Centralizer	*
* 153	* 37.60	* 5955.36	* 3480.20	*		*
* 154	* 38.18	* 5993.54	* 3442.02	*		*
* 155	* 38.82	* 6032.36	* 3403.20	*		*
* 156	* 37.81	* 6070.17	* 3365.39	*		*
* 157	* 39.13	* 6109.30	* 3326.26	*	*Centralizer	*

GEOSERVICES T.D.C

PHILLIPS A. O. Co

SELENE # 1

28/1/83

CASING LIST

CASING SIZE: 9 5/8

TYPE: BUTTRESS L-30

WEIGHT (lbs/ft): 47

CASING LENGTH: 3533.51

SHOE DEPTH : 9435.56

* Jt #	* LENGTH	* TOTAL LENGTH	* Depth From KB	* Remarks	*
* 158	* 38.45	* 6147.75	* 3287.81	*	*
* 159	* 38.56	* 6186.31	* 3249.25	*	*
* 160	* 38.19	* 6224.50	* 3211.06	*	*
* 161	* 38.13	* 6262.63	* 3172.93	*	*
* 162	* 37.49	* 6300.12	* 3135.44	*Centralizer	*
* 163	* 38.92	* 6339.04	* 3096.52	*	*
* 164	* 38.53	* 6377.57	* 3057.99	*	*
* 165	* 38.96	* 6416.53	* 3019.03	*	*
* 166	* 38.64	* 6455.17	* 2980.39	*	*
* 167	* 37.76	* 6492.93	* 2942.63	*	*
* 168	* 37.82	* 6530.75	* 2904.81	*Centralizer	*
* 169	* 39.22	* 6569.97	* 2865.59	*	*
* 170	* 38.63	* 6608.60	* 2826.96	*	*
* 171	* 38.49	* 6647.09	* 2788.47	*	*
* 172	* 38.05	* 6685.14	* 2750.42	*	*
* 173	* 37.98	* 6723.12	* 2712.44	*Centralizer	*
* 174	* 38.84	* 6761.96	* 2673.60	*	*
* 175	* 38.45	* 6800.41	* 2635.15	*	*
* 176	* 37.90	* 6838.31	* 2597.25	*	*
* 177	* 36.18	* 6874.49	* 2561.07	*Centralizer	*
* 178	* 38.68	* 6913.17	* 2522.39	*	*
* 179	* 37.78	* 6950.95	* 2484.61	*	*
* 180	* 38.46	* 6989.41	* 2446.15	*	*
* 181	* 39.01	* 7028.42	* 2407.14	*	*
* 182	* 37.72	* 7066.14	* 2369.42	*	*
* 183	* 37.70	* 7103.84	* 2331.72	*	*
* 184	* 38.94	* 7142.78	* 2292.78	*Centralizer	*
* 185	* 37.61	* 7180.39	* 2255.17	*	*
* 186	* 38.75	* 7219.14	* 2216.42	*	*
* 187	* 39.00	* 7258.14	* 2177.42	*	*
* 188	* 39.03	* 7297.17	* 2138.39	*	*
* 189	* 37.89	* 7335.06	* 2100.50	*	*
* 190	* 38.96	* 7374.02	* 2061.54	*Centralizer	*
* 191	* 37.28	* 7411.30	* 2024.26	*	*
* 192	* 38.65	* 7449.95	* 1985.61	*	*
* 193	* 38.73	* 7488.68	* 1946.88	*	*
* 194	* 37.93	* 7526.61	* 1908.95	*	*
* 195	* 39.14	* 7565.75	* 1869.81	*Centralizer	*
* 196	* 38.89	* 7604.64	* 1830.92	*	*
* 197	* 36.71	* 7641.35	* 1794.21	*	*

GEOSERVICES T.D.C

PHILLIPS A. O. Co

SELENE # 1

28/1/83

CASING LIST

CASING SIZE: 9 5/8

TYPE: BUTTRESS L-80

WEIGHT(lbs/ft): 47

CASING LENGTH: 8533.51

SHOE DEPTH : 9435.56

```
*****
* Jt # * LENGTH * TOTAL LENGTH * Depth From KB *      Remarks      *
*****
* 198 * 38.97 * 7680.32 * 1755.24 *      *      *
* 199 * 39.61 * 7719.93 * 1715.63 *      *      *
* 200 * 37.20 * 7757.13 * 1678.43 * *Centralizer *
* 201 * 37.79 * 7794.92 * 1640.64 *      *      *
* 202 * 39.08 * 7834.00 * 1601.56 *      *      *
* 203 * 38.56 * 7872.56 * 1563.00 *      *      *
* 204 * 38.99 * 7911.55 * 1524.01 *      *      *
* 205 * 38.67 * 7950.22 * 1485.34 * *Centralizer *
* 206 * 39.17 * 7989.39 * 1446.17 *      *      *
* 207 * 36.80 * 8026.19 * 1409.37 *      *      *
* 208 * 38.96 * 8065.15 * 1370.41 *      *      *
* 209 * 38.58 * 8103.73 * 1331.83 *      *      *
* 210 * 37.94 * 8141.67 * 1293.89 * *Centralizer *
* 211 * 37.84 * 8179.51 * 1256.05 *      *      *
* 212 * 38.07 * 8217.58 * 1217.98 *      *      *
* 213 * 38.59 * 8256.17 * 1179.39 *      *      *
* 214 * 37.75 * 8293.92 * 1141.64 *      *      *
* 215 * 37.74 * 8331.66 * 1103.90 *      *      *
* 216 * 37.78 * 8369.44 * 1066.12 * *Centralizer *
* 217 * 38.19 * 8407.63 * 1027.93 *      *      *
* 218 * 38.55 * 8446.18 * 989.38 *      *      *
* 219 * 38.16 * 8484.34 * 951.22 *      *      *
* 220 * 38.91 * 8523.25 * 912.31 *      *      *
* 221 * 10.26 * 8533.51 * 902.05 * *Csg hanger *
*****
```

GEOSERVICES T.D.C.

SELENE # 1

8 1/2" PHASE

SUMMARY

After running in and cementing the 9 5/8" casing, the BOP's were successfully tested. Bit # 14 was run and tagged cement at 2841m. Cement, float collar and casing shoe were drilled out then a Leak-off test was performed at 2901m. The equivalent mud weight to fracture the formation was 13.3 ppg.

BIT # 14, SMITH F2, drilled from 2898m to 3140.5m. A Drilling break occurred between 3137.5 to 3140.5m. Following the decision to take a core, the bit was pulled out.

DIAMOND CORE BIT # 1, ACC RM FLASH, core from 3140.5m to 3155.6m. The recovery was 90%. Sand at the bottom lead to the decision to carry on coring.

DIAMOND CORE BIT # 2, ACC STAR FD, core from 3155.6m to 3162.5m. The recovery was 82 %.

BIT # 15, SMITH F2, drilled from 3162.5m to TD, 3539m.

After pulling out and cleaning the hole with a wiper trip to the casing shoe, Schlumberger was rigged up and the open hole logged.

The logs run were: DIL-SLS-GR/LDL-CNL-NGS/HDT.

A RFT and CST were performed. Prior to these, a Velocity Survey was run. The well was then plugged and abandoned.

ROP/WOB/RPM PRACTICE

2 bits and 2 core bits were used to complete the 8 1/2" phase. The total drilling time was 76.24h, giving an average ROP of 8.1 m/h (7.4 mn/m). Total bottom time (Without trip time) was 101.73h. The total coring time was 15.63h. The average ROP was 1.42 m/h (42.2 mn/m). Total bottom time for coring (without trip time) was 19.9h.

Drilling practice can be summarized in the following table:

VS BITS	ROP	WOB	RPM	FR
	mn/m	klbs		gpm

BIT # 14	5.7	28	62	397
CORE # 1	35	18	82	171
CORE # 2	60.3	10	56	198
BIT # 15	8.5	30	60	343

Drilling practice versus intervals of depth would be a long list of slow drilling sections alternating with fast drilling sections. It would be reflective of the nature of the formations encountered: interbeds of Sand (fast drilling), coal (fast drilling) and shale (slow drilling). The ROP ranged from 1 to 7 mn/m in the sand and coal, but up to 7 to 25 mn/m in the shaly sections.

HYDRAULICS

The mud used during the 8 1/2" phase was a seawater-polymeres type. The mud weight was kept at 9 ppg, PV around 10/13, YP 10/14, Gel 2/4. BIT # 14 had 2*10 + 1*12/32 jets. The average flow rate was 397 gpm. The bit HHP ratio was 76% (7.7 HP/sq.in), higher than the optimum. The annulus flow was turbulent.

BIT # 15 had 3*10/32 jets. A slightly lower flow rate, 343 gpm, gave nearly the same high HHP ratio: 74.6% (6.55 HP/sq.in). But the flow in the annulus was, due to slower mud velocity, laminar, avoiding a possible damage of the open hole.

LEAK-OFF TEST

A LOT was performed at 2901m. 5 barrels were pumped before the formation started to fracture. A pressure of 2100 psi was taken as intake pressure. Mud weight was 9 ppg. These give 13.3 ppg EMW for the formation fracture gradient at this depth.

CUTTING TRANSPORT TABLES

The tables provide a quick look at hole cleaning and cuttings removal. By controlling the RCP, raising or lowering the flow rate or changing the rheological properties of the mud, one can decide the action necessary to provide the most efficient hole cleaning.

In the following tables the data has been calculated between DC and CH and also between DP and OH, with the specific flowrates and mud properties used over the selected interval. Cuttings sizes are in decimal inches.

The following is a brief explanation of the terms utilised :

Vs = slip velocity (ft/min)

Vc = annular velocity - slip velocity

Cf = cuttings generated at the bit
(gallons/gallon of mud)

Ca = cuttings in annulus
(gallons/gallon of mud)

Rct = cuttings transport ratio (decimal percentage)
= cutting velocity/annular velocity

Interval: 10371ft. to 11608ft.

ROP: 16.06 ft/hr.

Flow rate 390.0 gpm.

Ann.Vel: 318.63 ft/min (DC/OH)

MW: 9.0 ppg PV 12 YP 14
n = 0.585 K = 0.625

Gel (10 sec) 2 YP/PV 1.17

Cuttings Density: 2.67 (Sand)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	137.80	180.82	0.5675	0.0020	0.0036
1.250	125.80	192.83	0.6052	0.0020	0.0033
1.000	112.52	206.11	0.6469	0.0020	0.0031
0.750	97.44	221.19	0.6942	0.0020	0.0029
0.500	79.56	239.07	0.7503	0.0020	0.0027
0.250	37.33	281.29	0.8828	0.0020	0.0023
0.125	18.67	299.96	0.9414	0.0020	0.0022

Interval: 10371ft. to 11608ft.

ROP: 16.06 ft/hr.

Flow rate 390.0 gpm.

Ann.Vel: 318.63 ft/min (DC/OH)

MW: 9.0 ppg PV 12 YP 14
n = 0.585 K = 0.625

Gel (10 sec) 2 YP/PV 1.17

Cuttings Density: 2.70 (Shale)

Cutting size	Vs	Vc	Rct	Cf	Ca
1.500	139.10	179.53	0.5635	0.0020	0.0036
1.250	126.98	191.65	0.6015	0.0020	0.0034
1.000	113.57	205.06	0.6436	0.0020	0.0031
0.750	98.36	220.27	0.6913	0.0020	0.0029
0.500	80.31	238.32	0.7480	0.0020	0.0027
0.250	37.80	280.83	0.8814	0.0020	0.0023
0.125	18.90	299.73	0.9407	0.0020	0.0022

GEOSERVICES TDC

SELENE # 1

OVERPRESSURE SUMMARY

Although no overpressures were expected during the drilling of SELENE # 1, various indicators were used for the detection of possible abnormally compacted formations. These included:

DCS Exponent, Flowline temperature, Gas shows.

DCS EXPONENT

The top section formations (to 2250m) being calcarenite, it was difficult to establish a good trend line. From 2250 to around 2500, the DCS curve showed a leftward trend. This was due to Marl formation behaving like a transition zone between calcarenite and shale formations. As the formation became more shaly, the DCS curve kept to the left but followed a parallel trend to the normal trend. The low values of DCS indicate unconsolidation rather than overpressure. At 2843m, a sharp deviation to the left indicate the top of Base Lakes Entrance Siltstone. From 3000m to TD, 3539m, the DCS curve is reflective of interbeds of shale and sand.

GAS SHOWS

No significant amount of gas were recorded from top hole down to 2600m. From 2600m to 2700m, the background gas showed trace of C1 and maximum peaks of 0.4% C1 were recorded.

From 2700m to 2900m, the background gas was 0.1 to 0.2 % of C1; trace of C2 were recorded.

From 2900m to 3295m, the background gas was formed of trace C1 and occasionally trace of C2 and C3.

During coring, the max. gas recorded were: 0.17% C1; 0.035% C2; 0.025% C3; tr iC4.

From 3295m down to TD, 3539m, gas recording became, with connection gas of: 0.9 to 1.5% C1 ; 0.1 to 0.11% C2 ; 0.03 to 0.09% C3.

PE603625

This is an enclosure indicator page.
The enclosure PE603625 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603625 has the following characteristics:

ITEM_BARCODE = PE603625
CONTAINER_BARCODE = PE906319
NAME = Complete Downhole Log
BASIN = GIPPSLAND
PERMIT = VIC/P18
TYPE = WELL
SUBTYPE = MUD_LOG
DESCRIPTION = Complete Downhole Log for Selene-1
showing D Exponent, Pf/Frac, Lithology
and Porosity
REMARKS =
DATE_CREATED = 28/02/83
DATE_RECEIVED = 11/07/83
W_NO = W795
WELL_NAME = SELENE-1
CONTRACTOR = GEOSERVICES
CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE603626

This is an enclosure indicator page.
The enclosure PE603626 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603626 has the following characteristics:

ITEM_BARCODE = PE603626
CONTAINER_BARCODE = PE906319
NAME = Downhole Log, 1 of 6
BASIN = GIPPSLAND
PERMIT = VIC/P18
TYPE = WELL
SUBTYPE = MUD_LOG
DESCRIPTION = Downhole Log for Selene-1 showing D
Exponent, Pf/Frac, Lithology and
Porosity, 1 of 6
REMARKS =
DATE_CREATED = 28/02/83
DATE_RECEIVED = 11/07/83
W_NO = W795
WELL_NAME = SELENE-1
CONTRACTOR = GEOSERVICES
CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE603627

This is an enclosure indicator page.
The enclosure PE603627 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603627 has the following characteristics:

ITEM_BARCODE = PE603627
CONTAINER_BARCODE = PE906319
NAME = Downhole Log, 2 of 6
BASIN = GIPPSLAND
PERMIT = VIC/P18
TYPE = WELL
SUBTYPE = MUD_LOG
DESCRIPTION = Downhole Log for Selene-1 showing D
Exponent, Pf/Frac, Lithology and
Porosity, 2 of 6
REMARKS =
DATE_CREATED = 28/02/83
DATE_RECEIVED = 11/07/83
W_NO = W795
WELL_NAME = SELENE-1
CONTRACTOR = GEOSERVICES
CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE603628

This is an enclosure indicator page.
The enclosure PE603628 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603628 has the following characteristics:

ITEM_BARCODE = PE603628
CONTAINER_BARCODE = PE906319
NAME = Downhole Log, 3 of 6
BASIN = GIPPSLAND
PERMIT = VIC/P18
TYPE = WELL
SUBTYPE = MUD_LOG
DESCRIPTION = Downhole Log for Selene-1 showing D
Exponent, Pf/Frac, Lithology and
Porosity, 3 of 6
REMARKS =
DATE_CREATED = 28/02/83
DATE_RECEIVED = 11/07/83
W_NO = W795
WELL_NAME = SELENE-1
CONTRACTOR = GEOSERVICES
CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE603629

This is an enclosure indicator page.
The enclosure PE603629 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603629 has the following characteristics:

- ITEM_BARCODE = PE603629
- CONTAINER_BARCODE = PE906319
- NAME = Downhole Log, 4 of 6
- BASIN = GIPPSLAND
- PERMIT = VIC/P18
- TYPE = WELL
- SUBTYPE = MUD_LOG
- DESCRIPTION = Downhole Log for Selene-1 showing D
Exponent, Pf/Frac, Lithology and
Porosity, 4 of 6
- REMARKS =
- DATE_CREATED = 28/02/83
- DATE_RECEIVED = 11/07/83
- W_NO = W795
- WELL_NAME = SELENE-1
- CONTRACTOR = GEOSERVICES
- CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE603630

This is an enclosure indicator page.
The enclosure PE603630 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603630 has the following characteristics:

ITEM_BARCODE = PE603630
CONTAINER_BARCODE = PE906319
NAME = Downhole Log, 5 of 6
BASIN = GIPPSLAND
PERMIT = VIC/P18
TYPE = WELL
SUBTYPE = MUD_LOG
DESCRIPTION = Downhole Log for Selene-1 showing D
Exponent, Pf/Frac, Lithology and
Porosity, 5 of 6
REMARKS =
DATE_CREATED = 28/02/83
DATE_RECEIVED = 11/07/83
W_NO = W795
WELL_NAME = SELENE-1
CONTRACTOR = GEOSERVICES
CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE603631

This is an enclosure indicator page.
The enclosure PE603631 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603631 has the following characteristics:

ITEM_BARCODE = PE603631
CONTAINER_BARCODE = PE906319
NAME = Downhole Log, 6 of 6
BASIN = GIPPSLAND
PERMIT = VIC/P18
TYPE = WELL
SUBTYPE = MUD_LOG
DESCRIPTION = Downhole Log for Selene-1 showing D
Exponent, Pf/Frac, Lithology and
Porosity, 6 of 6
REMARKS =
DATE_CREATED = 28/02/83
DATE_RECEIVED = 11/07/83
W_NO = W795
WELL_NAME = SELENE-1
CONTRACTOR = GEOSERVICES
CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE603632

This is an enclosure indicator page.
The enclosure PE603632 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603632 has the following characteristics:

- ITEM_BARCODE = PE603632
- CONTAINER_BARCODE = PE906319
- NAME = Temperature Log
- BASIN = GIPPSLAND
- PERMIT = VIC/P18
- TYPE = WELL
- SUBTYPE = WELL_LOG
- DESCRIPTION = Temperature Log for Selene-1
- REMARKS =
- DATE_CREATED = 28/02/83
- DATE_RECEIVED = 11/07/83
- W_NO = W795
- WELL_NAME = SELENE-1
- CONTRACTOR = GEOSERVICES
- CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE603633

This is an enclosure indicator page.
The enclosure PE603633 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE603633 has the following characteristics:

ITEM_BARCODE = PE603633
CONTAINER_BARCODE = PE906319
 NAME = Lithology Log
 BASIN = GIPPSLAND
 PERMIT = VIC/P18
 TYPE = WELL
 SUBTYPE = WELL_LOG
 DESCRIPTION = Lithology Log for Selene-1
 REMARKS =
 DATE_CREATED = 28/02/83
 DATE_RECEIVED = 11/07/83
 W_NO = W795
 WELL_NAME = SELENE-1
 CONTRACTOR = GEOSERVICES
 CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

PE906323

This is an enclosure indicator page.
The enclosure PE906323 is enclosed within the
container PE906319 at this location in this
document.

The enclosure PE906323 has the following characteristics:

ITEM_BARCODE = PE906323
CONTAINER_BARCODE = PE906319
NAME = Leak Off Test
BASIN = GIPPSLAND
PERMIT = VIC/P18
TYPE = WELL
SUBTYPE = DIAGRAM
DESCRIPTION = Leak Off Test (9.63 Casing) Graph for
Selene-1
REMARKS =
DATE_CREATED = 28/02/83
DATE_RECEIVED = 11/07/83
W_NO = W795
WELL_NAME = SELENE-1
CONTRACTOR = GEOSERVICES
CLIENT_OP_CO = PHILLIPS AUSTRALIAN OIL COMPANY

(Inserted by DNRE - Vic Govt Mines Dept)

GEOSERVICES
ON-LINE TDC

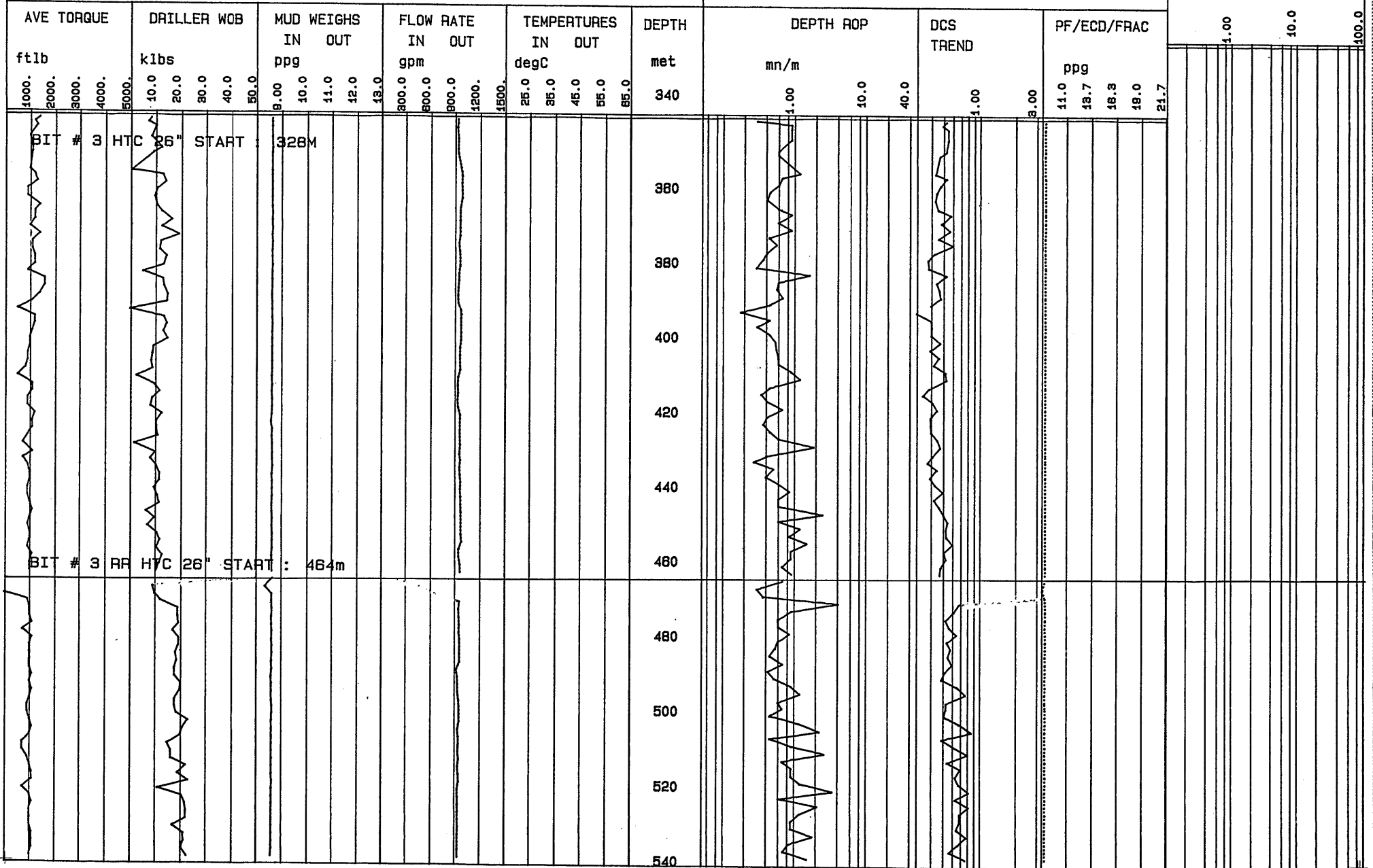
REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

28/ 12/ 82

SELENE # 1



Geoservices overseas S.A.

ZERO

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

%

1.00

10.0

100.0

29/ 12/ 82

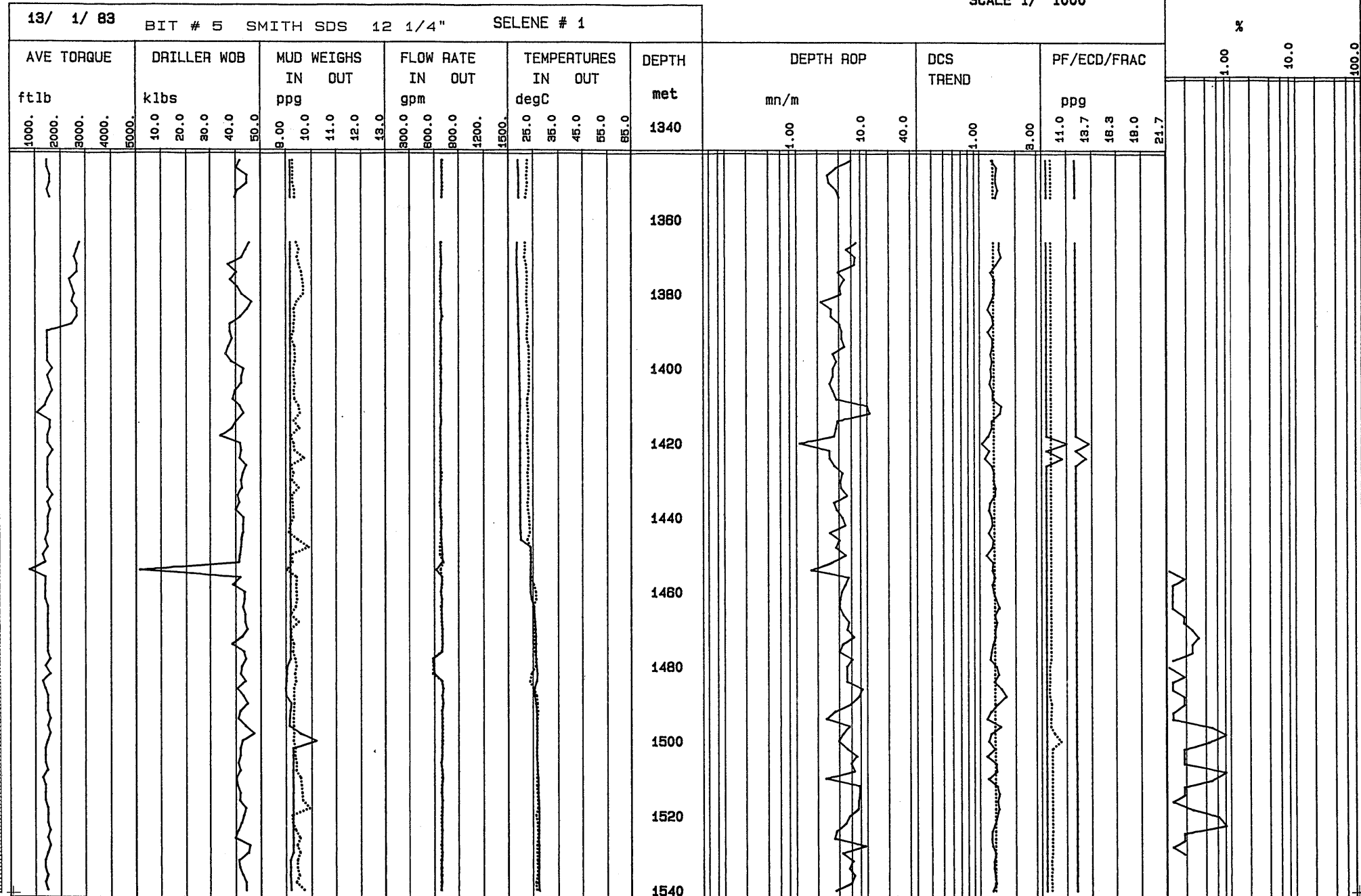
SELENE # 1

AVE TORQUE					DRILLER WOB					MUD WEIGHS					FLOW RATE					TEMPERATURES					DEPTH			DEPTH ROP			DCS TREND		PF/ECD/FRAC					TOTAL GAS		
ftlb					klbs					ppg					gpm					degC					met			mn/m					ppg					%		
1000.	2000.	3000.	4000.	5000.	10.0	20.0	30.0	40.0	50.0	8.00	10.0	11.0	12.0	13.0	800.0	800.0	800.0	1200.	1500.	25.0	35.0	45.0	55.0	65.0	540	1.00	10.0	40.0	1.00	8.00	11.0	13.7	16.3	18.0	21.7	1.00	10.0	100.0		
																									540															
																				580																				
																				580																				
																				600																				
																				620																				
																				640																				
																				660																				
																				680																				
																				700																				
																				720																				
																				740																				

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

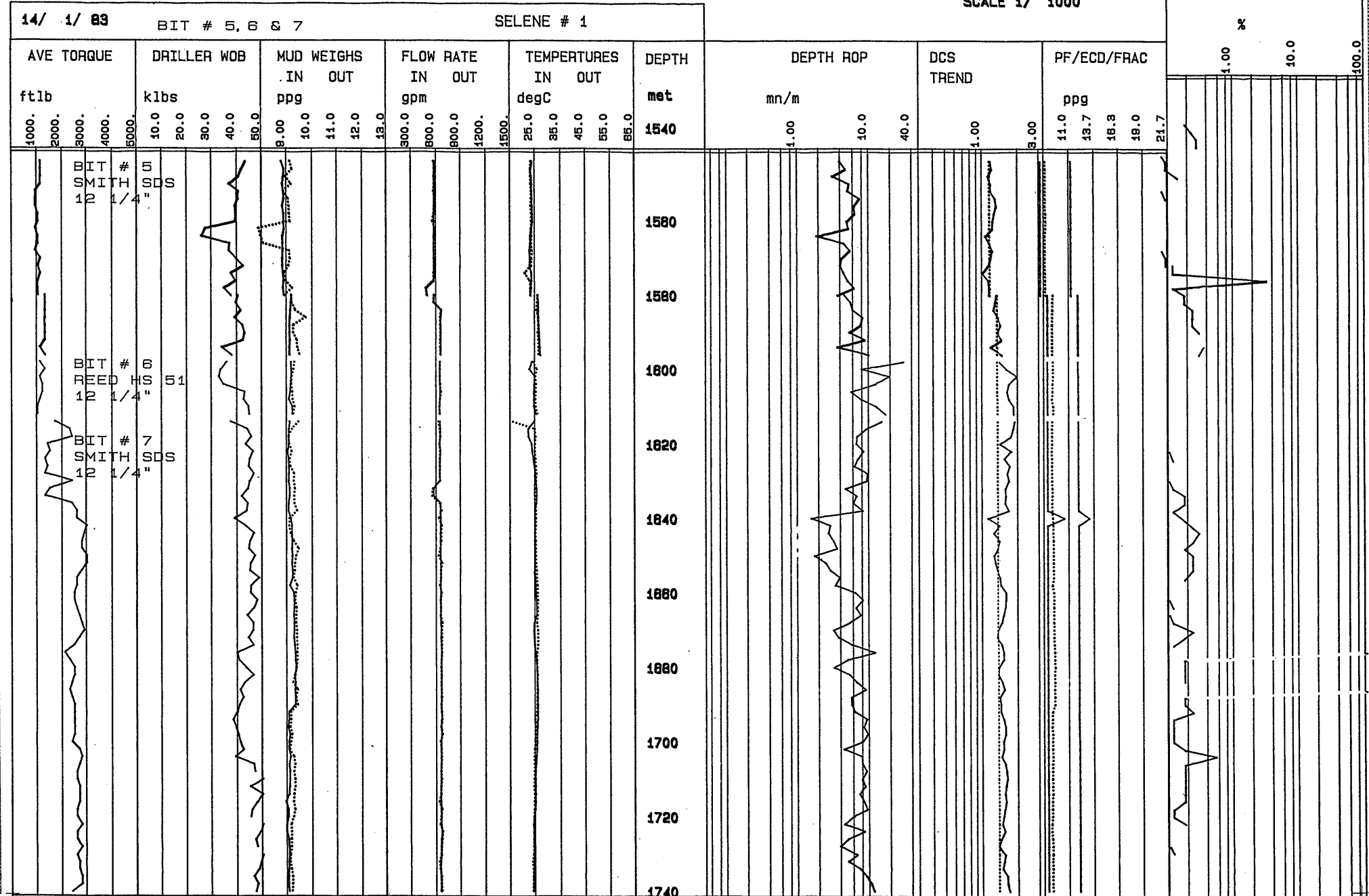


GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS



GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

15/ 1/ 83		BIT # 7 & 8		SELENE # 1								TOTAL GAS																										
AVE TORQUE		DRILLER WOB		MUD WEIGHS		FLOW RATE		TEMPERTURES		DEPTH		DEPTH ROP		DCS TREND		PF/ECD/FRAC		%																				
ftlb		klbs		ppg		gpm		degC		met		mn/m				ppg																						
1000.	2000.	3000.	4000.	5000.	10.0	20.0	30.0	40.0	50.0	9.00	10.0	11.0	12.0	13.0	800.0	800.0	800.0	1200.	1500.	25.0	35.0	45.0	55.0	65.0	1740	1.00	10.0	40.0	1.00	3.00	11.0	13.7	16.3	18.0	21.7	1.00	10.0	100.0
<p>BIT # 8 SMITH SDT 1 1/4"</p>																																						
<p>1760</p>																																						
<p>1780</p>																																						
<p>1800</p>																																						
<p>1820</p>																																						
<p>1840</p>																																						
<p>1860</p>																																						
<p>1880</p>																																						
<p>1900</p>																																						
<p>1820</p>																																						
<p>1840</p>																																						

GEOSERVICES
ON-LINE TDC

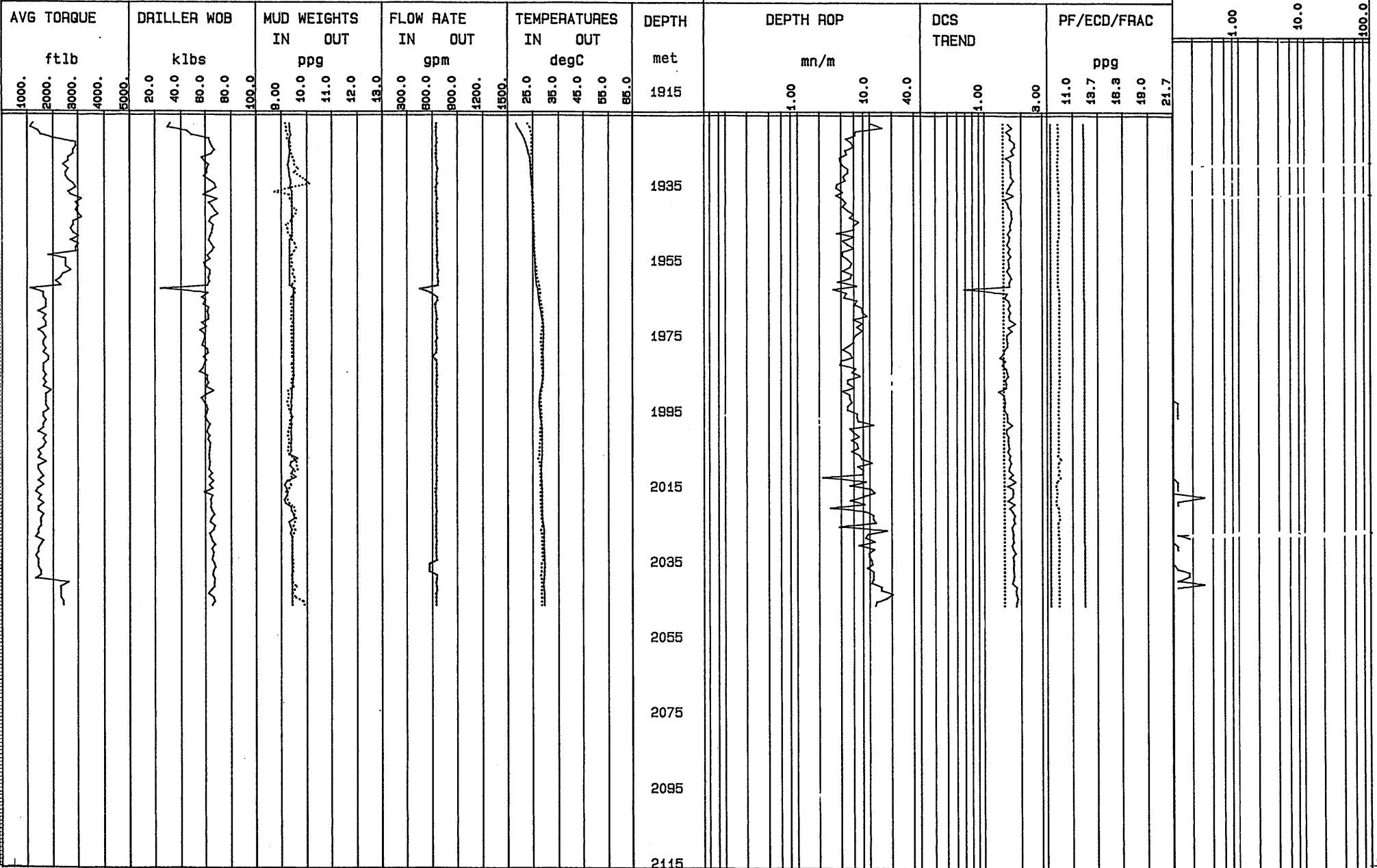
REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

%

18/ 1/ 83 BIT # 9 SMITH SDT 12 1/4" SELENE # 1



Geoservices Overseas S.A.

ZERO

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

19/ 1/ 83 BIT # 10 SMITH SDGH 12 1/4" SELENE # 1

AVG TORQUE		DRILLER WOB		MUD WEIGHTS		FLOW RATE		TEMPERATURES		DEPTH	DEPTH ROP		DCS TREND	PF/ECD/FRAC			TOTAL GAS		
ftlb		klbs		IN	OUT	IN	OUT	IN	OUT		met	mn/m			ppg			%	
1000.	2000.	20.0	40.0	8.00	10.0	800.0	800.0	25.0	25.0	2040	1.00	10.0	1.00	11.0	1.00	1.00	1.00	10.0	1000.0
3000.	4000.	60.0	80.0	10.0	11.0	800.0	800.0	35.0	35.0				3.00	13.7					
5000.		12.0	13.0	1200.	1500.			45.0	45.0					18.3					
								55.0	55.0					19.0					
								65.0	65.0					21.7					
										2060									
										2080									
										2100									
										2120									
										2140									
										2160									
										2180									
										2200									
										2220									
										2240									

Geoservices overseas S.A.

ZERO

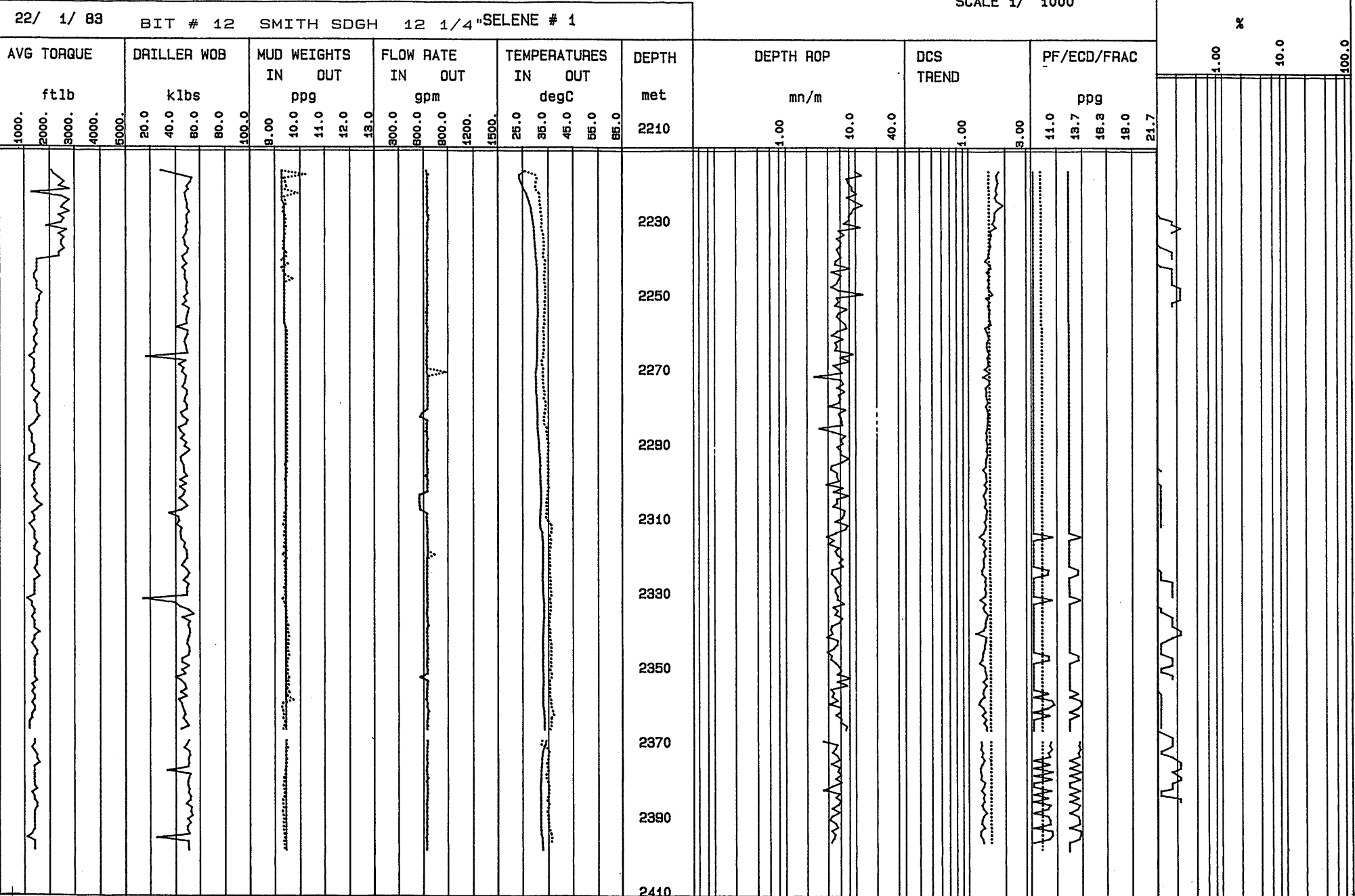
GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

%



GEOSERVICES
ON-LINE TDC

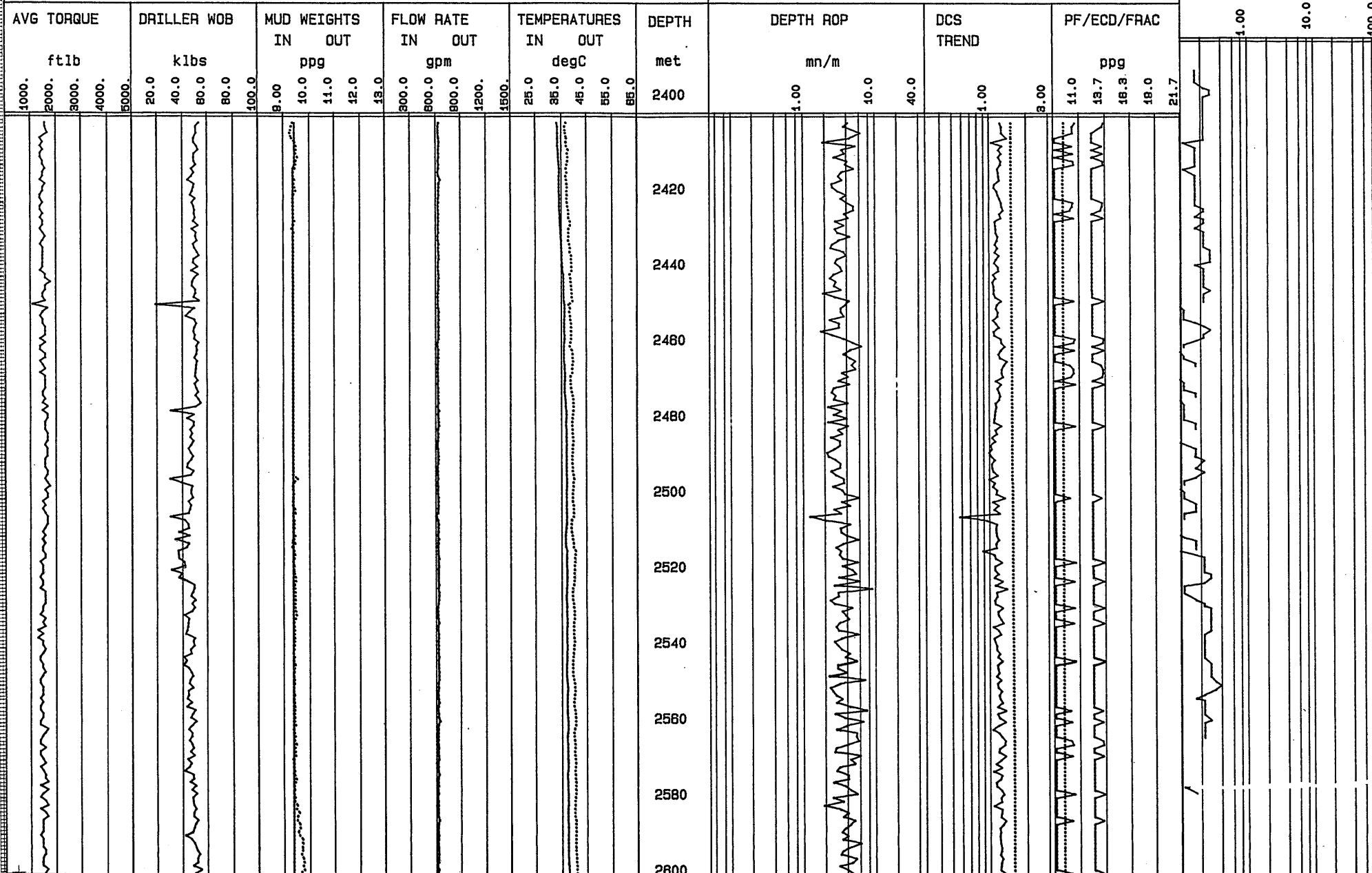
REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

%

29/ 1/ 83 BIT # 12 SMITH SDGH 12 1/4" SELENE # 1



ZERO

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

%

23/ 1/ 83		BIT # 12 & 13		SELENE # 1		DEPTH		DEPTH ROP		DCS TREND		PF/ECD/FRAC		TOTAL GAS			
AVG TORQUE	DRILLER WOB	MUD WEIGHTS		FLOW RATE		TEMPERATURES		DEPTH	DEPTH ROP		DCS TREND	PF/ECD/FRAC		TOTAL GAS			
ftlb	kibs	IN	OUT	IN	OUT	IN	OUT	met	mn/m			ppg		1.00	10.0	100.0	
1000. 2000. 3000. 4000. 5000.	20.0 40.0 80.0 80.0 100.0	8.00 10.0 11.0 12.0 13.0		800.0 800.0 900.0 1200. 1500.		25.0 35.0 45.0 55.0 65.0		2800	1.00 10.0 40.0		1.00 8.00	11.0 13.7 16.3 18.0 21.7					
								2820									
								2840									
								2880									
								2880									
								2700									
								2720									
								2740									
								2780									
								2780									
								2800									

BIT #
SMITH
1 1/4

GEOSERVICES
ON-LINE TDC

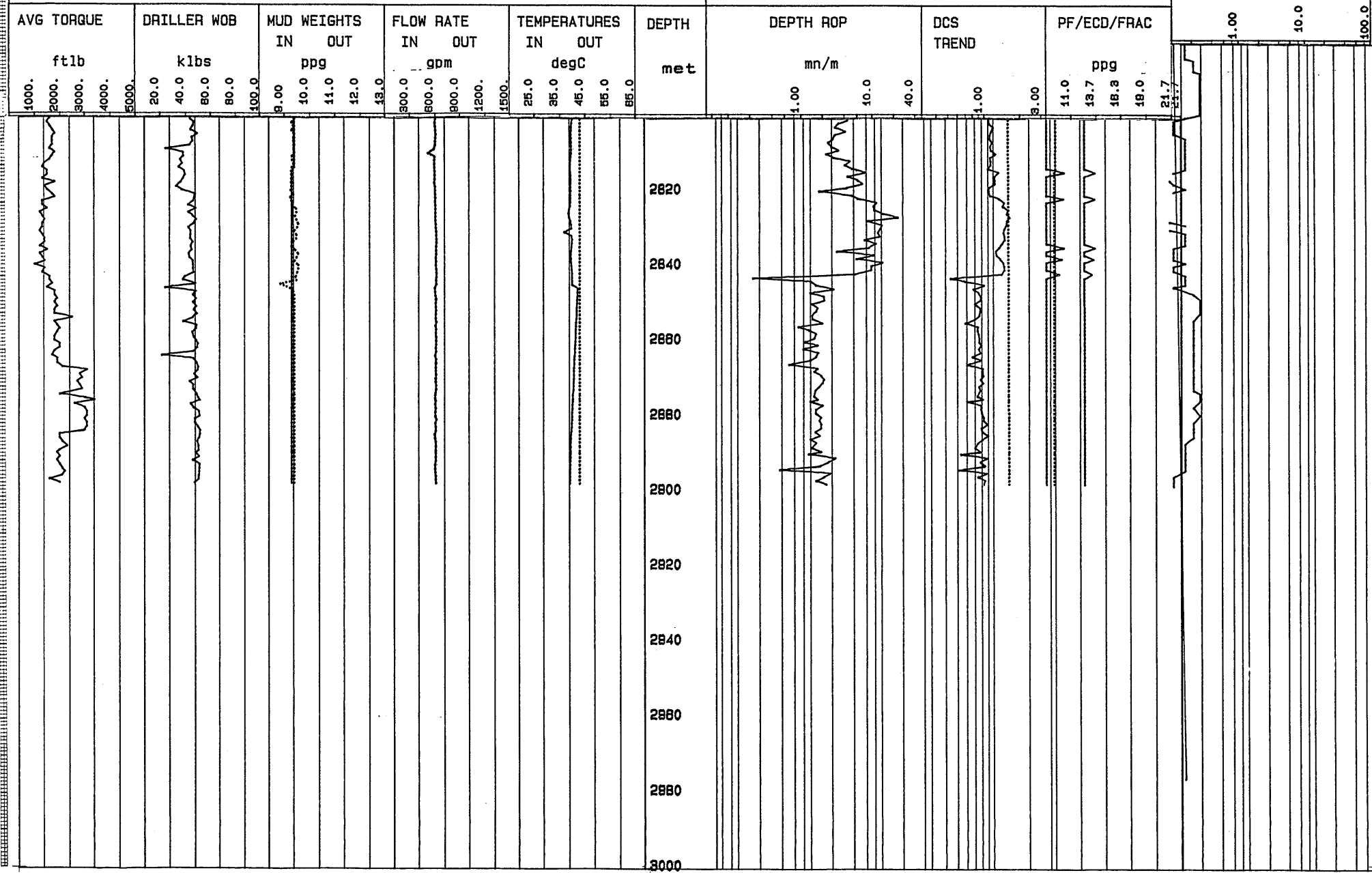
REAL TIME DEPTH PLOT

24/1/83 BIT # 13 SMITHSDT 12 1/4" SELENE # 1

scale 1/1000

TOTAL GAS

%



Geoservices overseas S.A.

ZERO

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

29/ 1/ 83 BIT # 14 SMITH F2 8 1/2" SELENE # 1

AVG TORQUE					DRILLER WOB				MUD WEIGHTS				FLOW RATE				TEMPERATURES					DEPTH			DEPTH ROP			DCS TREND		PF/ECD/FRAC					TOTAL GAS			
ftlb					klbs				ppg				gpm				degC					met			mm/m					ppg					%			
1000.	2000.	3000.	4000.	5000.	20.0	40.0	60.0	80.0	100.0	9.00	10.0	11.0	12.0	13.0	200.0	400.0	600.0	800.0	1000.	25.0	35.0	45.0	55.0	65.0	2890	1.00	10.0	40.0	1.00	3.00	11.0	13.7	16.3	18.0	21.7	1.00	10.0	100.0
																						2910																
																						2930																
																						2950																
																						2970																
																						2990																
																						3010																
																						3030																
																						3050																
																						3070																
																						3090																

Geoservices Overseas S.A.

ZERO

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 1000

TOTAL GAS

%

30/ 1/ 83 BIT # 14 SMITH F2 8 1/2" SELENE # 1

AVG TORQUE ftlb	DRILLER WOB Klbs	MUD WEIGHTS ppg		FLOW RATE gpm		TEMPERATURES degC		DEPTH met	DEPTH ROP mn/m	DCS TREND	PF/ECD/FAC		TOTAL GAS %
		IN	OUT	IN	OUT	IN	OUT				ppg		
1000. 2000. 3000. 4000. 5000.	20.0 40.0 80.0 80.0 100.0	9.00 10.0 11.0 12.0 13.0		200.0 400.0 600.0 800.0 1000.		25.0 35.0 45.0 55.0 65.0		3090	1.00 10.0 40.0		1.00 3.00	11.0 13.7 16.3 18.0 21.7	1.00 10.0 100.0
								3110					
								3130					
								3150					
								3170					
								3180					
								3210					
								3230					
								3250					
								3270					
								3280					

Geoservices overseas S.A.

ZERO

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 200

TOTAL GAS

%

31/ 1/ 83		CORE # 1 ACC RM Flash @ 1/2 SELENE # 1																																				
AVG TORQUE		DRILLER WOB				MUD WEIGHTS				FLOW RATE		TEMPERATURES		DEPTH	DEPTH ROP			DCS TREND	PF/ECD/FRAC			TOTAL GAS																
ftlb		kibs				ppg				gpm		degC		met	mn/m				ppg			%																
1000.	2000.	3000.	4000.	5000.	20.0	40.0	80.0	80.0	100.0	9.00	40.0	44.0	42.0	43.0	200.0	400.0	800.0	800.0	1000.	25.0	35.0	45.0	55.0	65.0	3140	1.00	10.0	40.0	1.00	8.00	14.0	13.7	18.3	18.0	21.7	1.00	10.0	100.0
														3145																								
														3150																								
														3155																								
														3180																								
														3185																								
														3170																								
														3175																								
														3180																								

ZERO

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

SCALE 1/ 200

TOTAL GAS

%

1/ 2/ 83 CORE # 2 ACC STAR TD 8 1/2" SELENE # 1

AVG TORQUE					DRILLER WOB				MUD WEIGHTS				FLOW RATE				TEMPERATURES					DEPTH			DEPTH ROP			DCS TREND		PF/ECD/FRAC				TOTAL GAS				
ftlb					klbs				ppg				gpm				degC					met			mn/m					ppg				%				
1000.	2000.	3000.	4000.	5000.	20.0	40.0	60.0	80.0	100.0	8.00	10.0	11.0	12.0	13.0	200.0	400.0	600.0	800.0	1000.	25.0	35.0	45.0	55.0	65.0	3150	1.00	10.0	40.0	1.00	3.00	11.0	13.7	16.3	18.0	21.7	1.00	10.0	100.0
																								3155														
																								3160														
																								3165														
																								3170														
																								3175														
																								3180														
																								3185														
																								3190														

Geoservices overseas S.A.

ZERO

GEOSERVICES
ON-LINE TDC

REAL TIME DEPTH PLOT

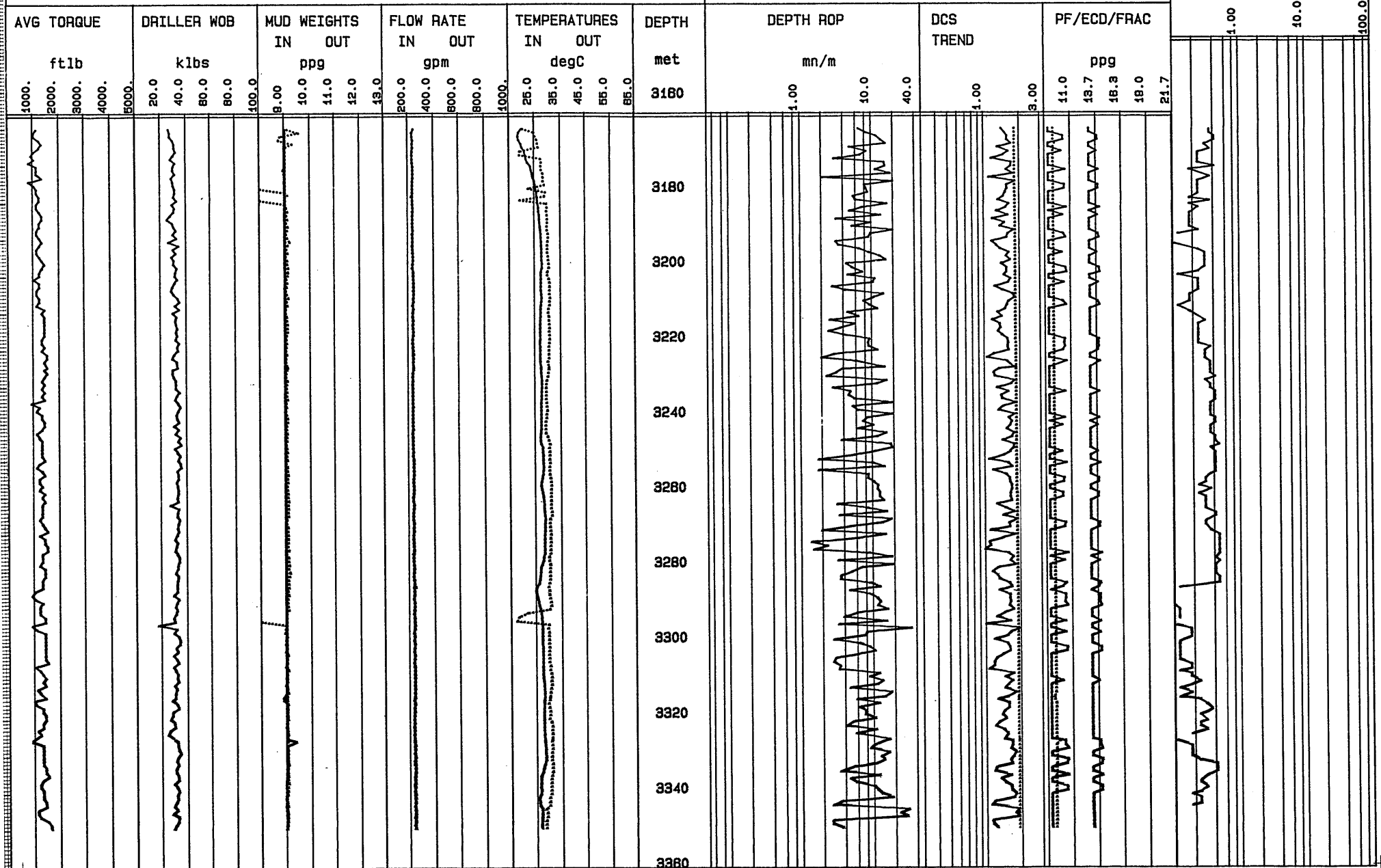
SCALE 1/ 1000

TOTAL GAS

2/ 2/ 83

BIT # 15 SMITH F2 8 1/2"

SELENE # 1



ZERO

GEOSERVICES
ON-LINE TDC

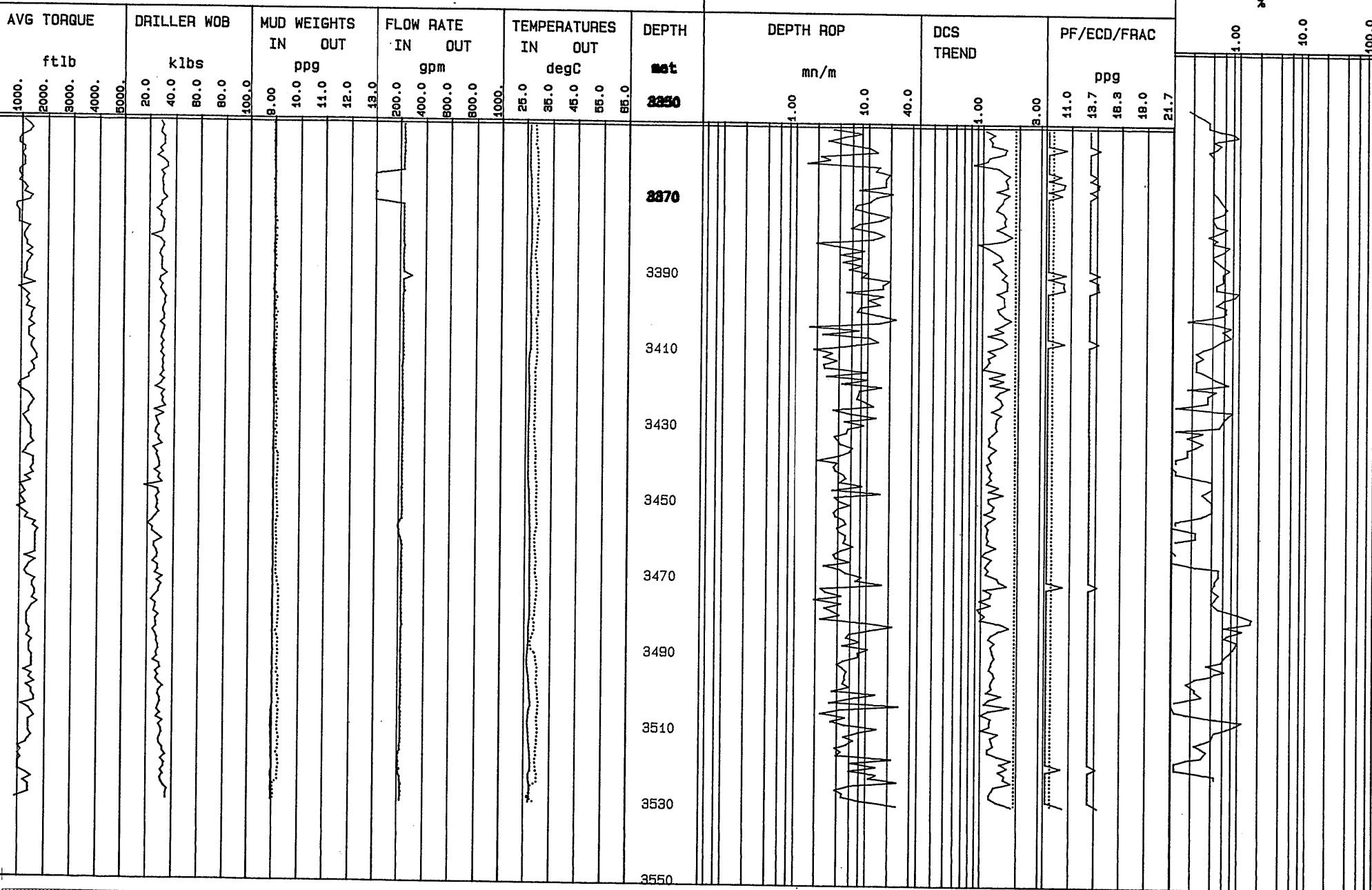
REAL TIME DEPTH PLOT

SCALE 1/ 1000

3/ 2/ 88

BIT # 15 SMITH F2 8 1/2"

SELENE # 1



Geoservices overseas S.A.

ZERO

