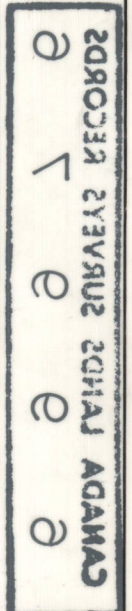


ADAMAS SCHAL SYVARS RECORD 0 0 0 0 0 0 0



Sable Island

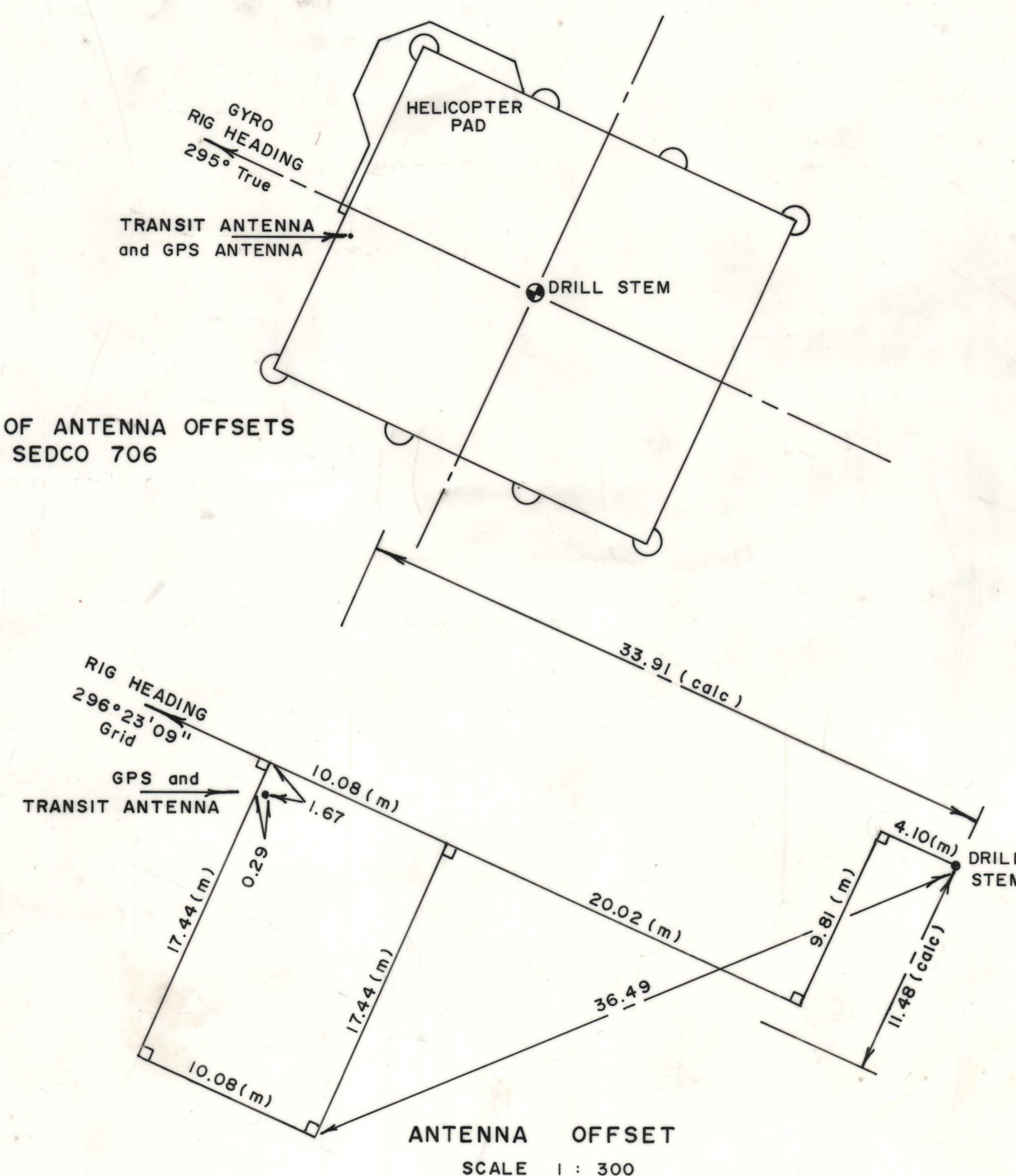
Sable Island

SUMMARY OF GLOBAL POSITIONING SYSTEM SURVEY (Confirmation)

- 1) POSITION IS A WEIGHTED MEAN OF 530 INDEPENDENT FIXES OBSERVED DURING THE PERIOD 05:32 h. G.M.T. AND 06:36 h. G.M.T. DAY 113 ON SATELLITES 6,8,9 AND 11.
- 2) WGS-72 POSITIONS WERE TRANSFORMED TO NWL-9D USING THE SEPPELIN TRANSFORMATIONS.
- 3) NWL-9D COORDINATES WERE TRANSFORMED TO 1927 NAD UTILIZING DATUM OFFSETS OF  
 $\Delta X = -39.0 \text{ m.}$ ,  $\Delta Y = 155.0 \text{ m.}$ ,  $\Delta Z = 187.0 \text{ m.}$
- 4) ANTENNA OFFSETS OF  $-4.79 \text{ m.}$  AND  $E = 35.48 \text{ m. (U.T.M.)}$  WERE APPLIED TO THE OBSERVED POSITION TO DERIVE THE COORDINATES OF THE DRILL STEM.

COORDINATES	X	2 349 642.08
CARTESIAN	Y	- 3 907 063.44
	Z	4 445 369.65
LATITUDE	$\emptyset$	44°28'13.78"
LONGITUDE	$\lambda$	58°58'40.83"
HR. ABOVE M.S.L. (H)		17.95 m.
GEOID HEIGHT (N)		15.40 m.
HEIGHT ABOVE (h)		33.35 m.
ELLIPSOID		

SUMMARY OF TRANSIT SATELLITE POSITION-TRANSLATION SURVEY						
		CONTROL STATION NORTECH WAREHOUSE CLSR 69327 26 ACCEPTED PASSES BETWEEN 18h. G.M.T. DAY 113 AND 17h. G.M.T. DAY 116.			DERIVED STATION "PESKOWSK A-99" 26 ACCEPTED PASSES BETWEEN 18h. G.M.T. DAY 113 AND 17h. G.M.T. DAY 116.	
		1927 NAD COORDINATES C.L.S.R. 69327	OBSERVED GEOCENTRIC COORDINATES BROADCAST EPHEMERIS	DERIVED DATUM SHIFT Broadcast MINUS NAD	OBSERVED GEOCENTRIC COORDINATES BROADCAST EPHEMERIS	DERIVED 1927 NAD COORDINATES GEOCENTRIC MINUS DATUM SHIFT
CARTESIAN COORDINATES	X	2 019 067.49	2 019 027.13	- 40.36	2 349 598.22	2 349 638.58
	Y	-4 066 548.16	-4 066 394.72	153.44	-3 906 910.69	-3 907 064.13
	Z	4 464 650.78	4 464 839.78	189.00	4 445 559.87	4 445 370.87
LATITUDE		44° 42' 49.804"				44° 28' 13.836"
LONGITUDE		63° 35' 43.094"				58° 58' 40.982"
SEA LEVEL Ht. (H)		63.24 m.				17.95 m.
GEOD Ht. (N)		5.40 m.				15.40 m.
SPHEROID Ht. (h)		68.64 m.				33.35 m.



CANADA LANDS SURVEYS RECORDS  
6 9 9 7 6  
DATE 12 SEPT 1985

PLAN AND FIELD NOTES OF SURVEY OF  
OFFSHORE EXPLORATORY WELL LOCATION  
SHELL PCI et al PESKOWESK A-99  
SABLE ISLAND  
IN UNIT A SECTION 99  
GRID AREA 44°30' N., 58°45' W.  
CANADA OIL AND GAS LAND REGULATIONS  
EXPLORATION AGREEMENT # 119  
SURVEYED UNDER THE DIRECT SUPERVISION OF T.J. CRAGO C.L.S.

FOR SHELL CANADA RESOURCES LIMITED  
BETWEEN APRIL 21 AND APRIL 26, 1985.  
BY NORTECH SURVEYS (CANADA) INC.  
WELL LOCATION 44°28'13.836"N. 58°58'40.982"W.

### LEGEND

POSITIONING WAS CONFIRMED USING TEXAS INSTRUMENTS TI 4100 GLOBAL POSITIONING SYSTEM UTILIZING 4 SATELLITES.

LEGAL POSITION OBTAINED BY TRANSLOCATION DOPPLER SATELLITE OBSERVATIONS  
USING JMR-4 RECEIVER. POSITIONS WERE COMPUTED USING GEODOP, (DOCUMENTATION  
AVAILABLE FROM GEODETIC SURVEY OF CANADA) YIELDING 26 COMMON PASSES.

DISTANCES ARE U.T.M. AND IN METERS AND ARE MEASURED UNLESS OTHERWISE NOTED.  
BEARINGS ARE U.T.M. GRID EXCEPT AS NOTED.  
ALL GEOGRAPHIC COORDINATES ARE REFERRED TO THE 1927 NORTH AMERICAN DATUM (NAD 27).  
ALL U.T.M. COORDINATES ARE COMPUTED FOR ZONE 21, CENTRAL MERIDIAN 57° W.  
WITH A FALSE EASTING OF 500 000 m. AT THE CENTRAL MERIDIAN.  
WATER DEPTH AT LOCATION IS 62.5 m  
HEIGHTS ARE DETERMINED BY SATELLITE OBSERVATIONS.  
GEOID UNDULATION ARE FROM GODDARD EARTH MODEL 10 C WITH  
 $\Delta X = 39.00$   $\Delta Y = -155.00$   $\Delta Z = -187.00$  AND  $X_{90} = 0.00$

I HEREBY CERTIFY THAT THIS PLAN OF SURVEY WAS MADE UNDER MY PERSONAL SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SHELL CANADA RESOURCES LTD.

K. J. Flanagan  
Barbara  
WITNESS  
June 4, 1985  
DATE

*T. C. 60*  
CANADA LAND SURVEYOR

*L. May*  
WITNESS

*May. 23, 1905.*  
DATE