

Westcl. Silt Lake 6-62 #951



Well Name Nom du puits		Westcoast et al Silt Lake G-62		Drilling Authority No. Autorisation de forage n°		951	
Field/Area Gisement/Région				Date Issued Date d'émission			
				80-01-25			
Location Emplacement		Unit Unité		Section		Permit or Lease	
		G		62			
Latitude				Longitude			
60° 01' 30" N				119° 12' 00" W			
U.W.L.R. N.R.U.E.P.				60.01667° N 119.20000° W			
U.W.L. No. N.I.P. No.				300 G62 6010 119000			
File Microfilmed				Rig. Release Date Date de transfert de la tour de forage			
				80-02-27			
Tour Sheets, Microfilmed				Status Statut			
				D & A			
				Information Release Date Date de publication autorisée des informations			
				82-02-27			

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

INDEX	DATE RECEIVED RECU LE	INDEX
Application for a Drilling Authority	80-01-25	Demande d'autorisation de forage
Well Completion Data	80-05-07	Renseignements sur le forage d'un puits
Well History Report		Données chronologiques sur le puits
Application to Amend a Drilling Authority		Demande de modification d'une autorisation de forage
Application to Change a Well Name		Demande de changement du nom d'un puits
Application to Abandon a Well or Suspend Drilling	80-05-27	Demande d'abandon d'un puits ou de suspension du forage
Application to Alter Condition of a Well		Demande d'autorisation de modifier l'état d'un puits
Well History Supplement		Supplément aux données chronologiques sur le puits
Well Completion Data		Renseignements sur le forage d'un puits
Work-Over Report No.		Rapport de reconditionnement n°
Application to Commingle Production before Measurement		Demande d'autorisation de mélanger la production avant jaugeage
Data for Back Pressure Test on Natural Gas Wells		Données de calcul de la capacité de production d'un puits de gaz naturel — Méthode graphique n° 7
Data for Back Pressure Test on Natural Gas Wells		Données de calcul de la capacité de production d'un puits de gaz naturel — Méthode de Vitter
M.P.R. — Oil — Calculations		Calcul du T.M.P. (Taux maximal de production) de pétrole
New Oil Well Report		Rapport sur un nouveau puits de pétrole
New Gas Well Report		Rapport sur un nouveau puits de gaz naturel
Well Inspection Report		Rapport d'inspection de l'emplacement d'un puits
Rig Inspection Report		Rapport d'inspection d'une tour de forage
Battery Inspection Report		Rapport d'inspection d'une batterie de puits
Equipment Report		Rapport d'inspection des compteurs
Well Card		Fiche de puits
New Service Well Report		Rapport sur un nouveau puits de service
Strat Service Logs		Rapport mensuel des injections d'eau
Logs — Large scale		Diagrammes: Grande échelle
Logs — Small scale		Diagrammes: Petite échelle



Indian and Northern
Affaires Canada

Affaires indiennes
et du Nord Canada

DRILLING AUTHORITY N°
N° DE L'AUTORISATION
DE FORAGE

951

DATE ISSUED - DATE DE DELIVRANCE

1980-01-25

WELL COMPLETION DATA

To be submitted in duplicate within thirty days after the completion, rework, abandonment, recompletion or suspension of every well.

RENSEIGNEMENTS SUR LES FORAGES

A présenter en double dans les trente jours suivant l'achèvement, la reprise, l'abandon, la remise en production et le reconditionnement de chaque puits ou après la suspension.

WELL NAME & N° - NOM ET N° DU Puits Westcoast et al Silt Lake G-62		PERMIT N° - N° DE PERMIS N79 A 181	LEASE N° - N° DE CONCESSION 39900
HOLDER - TITULAIRE Westcoast Petroleum Ltd.		EXPLORATION AGREEMENT N° - N° D'ACCORD D'EXPLORATION 2804 (Westcoast) 2806 (HBOG)	
OPERATOR - EXECUTANT Westcoast Petroleum Ltd.		PRODUCTION LICENCE N° - N° DE LICENCE DU PRODUCTEUR --	

LOCATION/SURFACE - EMPLACEMENT/SURFACE

UNIT - UNITÉ G	SECTION 62	GRID - ÉTENDUE QUADRILLÉE 60° 10' 119° 00'	LATITUDE 60° 01' 30" N	LONGITUDE 119° 12' 00" W
UNIQUE WELL IDENTIFIER - CODE D'ORDINATEUR 300 662 601 0119000		UNIVERSAL WELL LOCATION - RÉFÉRENCES UNIVERSELLES D'EMPLACEMENT DU Puits 60.01667° N 119.20000° W		

LOCATION/BOTTOM HOLE OR PRODUCING HORIZON - EMPLACEMENT/FOND DU SONDAGE OU HORIZON PRODUCTIF

UNIT - UNITÉ N/A	SECTION	GRID - ÉTENDUE QUADRILLÉE	LATITUDE	LONGITUDE
UNIQUE WELL IDENTIFIER - CODE D'ORDINATEUR		UNIVERSAL WELL LOCATION - RÉFÉRENCES UNIVERSELLES D'EMPLACEMENT DU Puits		

	DATE	DEPTH - PROFONDEUR	TRUE VERTICAL DEPTH VÉRITABLE PROFONDEUR VERTICALE	POOL(S) - GISEMENT(S)
SPUDED DÉBUT DES TRAVAUX	80-01-27			INTERVAL(S) OPEN TO PRODUCTION - INTERVALLE(S) DE PRODUCTION
SUSPENDED SUSPENSION DES TRAVAUX				
RESUMED OPERATIONS REPRISE DES TRAVAUX				
FINISHED DRILLING FORAGE TERMINÉ	80-02-21	1877m	1876.6m	
DEEPEMED APPROFONDISSEMENT				ELEVATION: GR - ALTITUDE DE SOL 608.4m WATER DEPTH - PROFONDEUR D'EAU 613.0m RIG N° - N° DE LA TOUR DE FORAGE 2 DRILLING CONTRACTOR - ENTREPRENEUR EN FORAGE Hi Tower Drilling Ltd.
COMPLETED (GAS/OIL) ACHEVEMENT (GAZ/PÉTROLE)				
ABANDONED ABANDON	80-02-26			
RIG RELEASED FIN DES TRAVAUX	80-02-27			

CASING RECORD - TUBAGE

CASING SIZE (mm) - DIAMÈTRE (mm)	WALL THICKNESS (mm) ÉPAISSEUR (mm)	GRADE QUALITÉ	MASS MASSE	AMOUNT LONGUEUR	SET AT - FIXATION A	MASS OF CEMENT & ADDITIVES MASSE DE CIMENT ET D'ADDITIFS
508mm					15m	to surface
244mm	8.95mm	K-55	53.5 kg/m	496.43m	495m	55.42 tonnes "G" + 2% CaCl ₂

GEOLOGICAL TOPS SOMMET DES FORMATIONS	ELEVATION - PROFONDEUR		CORE RECORD - CAROTTES					
	DEPTHS SOUS LE NIVEAU DU SOL	SUB SEA SOUS LE NIVEAU DE LA MER	FROM - DE	TO - A	REC REC	FROM - DE	TO - A	REC REC
Wabamun	537m	+76.0m	nil					
Winterburn	767m	-154.0m						
Jean Marie (Nisku)	915m	-302.0m						
Ft. Simpson (Ireton)	930m	-317.0m						
Slave Point	1518m	-905.0m						
Watt Mountain	1588m	-975.0m	LOG RECORD - DIAGRAMMES					
			RUN SÉRIE	TYPE OF LOG - GENRE DE DIAGRAMME		FROM - DE	TO - A	
Sulphur Point	1590m	-977.0m	1	DILL		1876	495	
Keg River	1670m	-1057.0m	1	SONIC		1876	495	
Lower Keg River	1760m	-1147.0m	1	CNL-FDC		1876	1450	
Chinchaga	1790m	-1177.0m	1	Mud Gas Log		1885	495	
Granite Wash	1833m	-1220.0m						
Pre Cambrian	1873m	-1260.0m						

CEMENTING RECORD (Plug, Squeezes, etc.) CIMENTATION (Bouchon, sous pression, etc.)				PERFORATING RECORD (Bullet Jet) PERFORATION (à balles à jet)				SERVICING RECORD (Acidizing, Fracing, etc.) ENTRETIEN (acidification, fracturation, etc.)			
Date	From - de	To - à	Remarks - Remarques	Date	From - de	To - à	Remarks - Remarques	Date	From - de	To - à	Remarks - Remarques
80-02-26	1877	1775	See Attachment No. 1					Nil			
80-02-26	1610	1500									
80-02-26	970	790									
80-02-26	550	450									
80-02-26	29	1									

DRILL STEM TEST - ESSAIS AUX TIGES

No. - N°	Date	Formation	From - de	To - à	V.O. Mins. Vanne ouverte (minutes)	ISI Mins. Première obturation (minutes)	FSI Mins. Obturation définitive (minutes)	ISIBHP Pression de force à la fin d'obturation	FSIBHP Pression de force à l'obturation définitive	IFBHP Pression de fond au lissage	FFBHP Pression de fond à l'écoulement définitif	LHP Pression hydrostatique de début	FHP Pression hydrostatique définitif	Remarks - Remarques
1	80-02-28	Keg River	1687	1670	20	60	120	13095	13163	3550	7004	17606	17606	Recovered 60m inhibitor water, 85m oil flecked salt water cut mud, 502m sulphurous salt water, 85m gas cut mud; No gas to surface

ANALYSIS - ANALYSE					PRESENT STATUS OF WELL ETAT ACTUEL DU PUIT				
Lab. No. N° de laboratoire	Sample Echantillon	From - de	To - à	Source	Remarks - Remarques	Oil Pétrole	Gas Gaz	Dry Sec	Susp. Travaux sus
F80-1397-1	Water	1670	1687	Top of Tool DST #1	Muddy water - orange filtrate				
F80-1397-2	Water	1670	1687	Middle of Tool DST #1	Muddy water - yellow filtrate				
F80-1397-3	Water	1670	1687	Middle of Tool DST #1	Muddy water - yellow filtrate				
F80-1397-4	Water	1670	1687	Bottom of Tool DST #1	Muddy water - cloudy filtrate				
EB-80-322	Static Bioassay	-	-	Drilling Mud	--				

Company
Société

Westcoast Petroleum Ltd.

Signed by
Signé par

R. J. Hutzel

Chief Drilling Engineer

Date

80-5-7

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

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

SILT LAKE G-62 ABANDONMENT

- Plug #1 From 1877 to 1775m. Designed to cover the Precambrian, Ernestina, Red Beds, Chinchaga and the Lower portion of the Lower Keg River. Ran 7.5 tonnes of Class "G" + 0.03% HR4. Plug down 1330 hrs, 80-2-25. Felt at 1762m w/3000 daN @ 1930 hrs. 80-2-25.
- Plug #2 1610 to 1500m. Designed to isolate the Lower Keg River and the Keg River by covering the Sulphur Pt., Watt Mtn., Slave Pt. and the Lower portion of the Ft. Simpson shale. Ran 7.5 tonnes Class "G" + 0.03% HR4. Plug down 80-2-25 - 2130 hrs. Felt at 1443m w/3000 daN @ 80-2-26 - 0330 hrs.
- Plug #3 From 950 to 790m. Designed to isolate the Wabamun above Plug #3. Ran 12.4 tonnes of Neat "G" plug down 80-2-26-800 hrs. Felt plug @ 764m w/3000 daN @ 80-2-26-1430 hrs.
- Plug #4 From 550 to 450m. Plug #4 is across the casing shoe to prevent the Wabamun and the covered Banff to flow into the casing. Ran 11.4 tonnes Class "G" + 2% CaCl. Plug down @ 80-2-26-1545 hrs and felt @ 424m w/3000 daN 80-2-26-2300 hrs.
- Plug #5 From 1-29m. Surface plug. Cemented with 1.8 tonnes of Class "G". Plug down @ 80-2-26-2330 hrs.

The casing has been cut-off 1m below ground level and a steel cap welded on it. A 50mm pipe welded to the cap and extending 1.5m above ground level has been installed. A plate bearing the well name (Silt Lake G-62) and location (longitude and latitude) has been welded onto the stake. The plate has been painted an orange color.

Westcoast Petroleum Ltd.

Ron Hutzel

Chief Drilling Engineer



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada

DRILLING AUTHORITY N°
N° DE L'AUTORISATION DE FORAGE

951

APPLICATION TO ABANDON

DEMANDE D'ABANDON D'UN Puits OU DE SUSPENSION DU FORAGE

In compliance with the "Canada Oil & Gas Land Regulations", application is hereby made for approval to abandon, to suspend drilling:-

Conformément au Règlement sur les terres pétrolières et gazéifères du Canada, nous demandons l'autorisation d'abandonner le puits ci-après ou de suspendre les travaux de forage.

NAME & N° OF WELL Westcoast et al Silt Lake G-62				
LOCATION: UNIT EMPLACEMENT: UNITÉ G	SECTION 62	GRID - ÉTENDUE QUADRILLÉE 60° 10' @ 119° 00'	LATITUDE 60° 01' 30" N	LONGITUDE 119° 12' 00" W
UNIVERSAL WELL LOCATION REFERENCE - RÉFÉRENCE UNIVERSELLE D'EMPLACEMENT DU Puits 60.01667° N 119.20000° W		UNIQUE WELL IDENTIFIER N° - CODE D'ORDINATEUR 300 G62 6010119000		
PERMIT N° - N° DE PERMIS N79A181	LEASE N° - N° DE CONCESSION 3990D	EXPLORATION AGREEMENT N° - N° D'ACCORD D'EXPLORATION 2804 (Westcoast) 2806 (HBOG)		DATE OF COMMENCEMENT OF PROPOSED PROGRAM DATE - DÉBUT D'EXECUTION DU PROGRAMME PROJETÉ January 27, 1980
HOLDER - TITULAIRE Westcoast Petroleum Ltd.				

OIL, GAS & WATER ENCOUNTERED (DEPTH) - PÉTROLE, GAZ ET EAU (PROFONDEUR)		
OIL AT - PÉTROLE A ---	GAS AT - GAZ A ---	WATER AT - EAU A ---
TOTAL DEPTH - PROFONDEUR GLOBALE 1877m	DATE OF LAST OPERATIONS - DATE DES DERNIERS TRAVAUX February 27, 1980	PRESENT CONDITION OF WELL - ÉTA - ACTUEL DU Puits abandoned

CASING RECORD - TUBAGE					
CASING SIZE, O.D. (mm) DIAMÈTRE EXTÉRIEUR (mm)	MASS - MASSE	AMOUNT - LONGUEUR	SET AT - FIXATION A	MASS OF CEMENT & ADDITIVES MASSE DE CIMENT ET D'ADDITIFS	AMOUNT PULLED LONGUEUR RÉCUPÉRÉE
508mm	Conductor Pipe	15m	to surface		--
244mm	53.5 kg/m	496.43m	495m	55.42 tonnes "G"	--
				+ 2% CaCl ₂	

ACTUAL ABANDONMENT PROGRAM - PROGRAMME D'ABANDON PROJETÉ				
PLUG - BOUCHON		GEOLOGICAL FORMATION FORMATION GÉOLOGIQUE	MASS OF CEMENT MASSE DE CIMENT	REMARKS - REMARQUES
N°	POSITION - PROFONDEUR			
1	1877-1775	Precambrian, Ernestina, Red Beds Chinchaga, Lower portion of Lower- Keg River	7.5 tonnes	Felt at 1762m with 3000 daN
2	1610-1500	Sulphur Pt, Watt Mtn, Slave Pt. Lower portion of Ft. Simpson shale	7.5 tonnes	Felt at 1443m with 3000 daN
3	950-790	Wabamun	12.4 tonnes	Felt at 764m with 3000 daN
4	550-450	Across Casing Shoe	11.4 tonnes	Felt at 424m with 3000 daN
5	0-29	Surface Plug	1.8 tonnes	

THE FOLLOWING LOGS HAVE BEEN RUN - LES DIAGRAMMES SUIVANTS ONT ÉTÉ TRACÉS
DILL, Sonic, CNL-FDC, and Mud Gas Log

OTHER OPERATIONS PROPOSED - AUTRES TRAVAUX PROJETÉS
The casing has been cut-off 1m below ground level and a steel cap welded on it. A 50mm pipe welded to the cap and extending 1.5m above ground level has been installed. A plate bearing the well name (Silt Lake G-62) and location (longitude and latitude) has been welded onto the stake. The plate has been painted an orange color.

OPERATIONS TO BE CARRIED OUT BY - LES TRAVAUX SERONT EXÉCUTÉS PAR
High Tower Drilling Ltd. Rig No. 2

ADDRESS - ADRESSE 1100, 540 5th Avenue S.W. Calgary, Alberta			
RESPONSIBLE AGENT IN FIELD - AGENT EXTÉRIEUR RESPONSABLE Heinz Kummer	ADDRESS - ADRESSE Wellsite	DATED AT - FAIT A Calgary	DATE

SIGNATURE 	TITLE - TITRE Chief Drilling Engineer	COMPANY - SOCIÉTÉ Westcoast Petroleum Ltd.
---------------	--	---

NOTE: The District Conservation Engineer's office must be notified before work is commenced. NOTA: Aviser le bureau de l'ingénieur en conservation du district avant de commencer les travaux.

APPROVAL (FOR BRANCH USE ONLY) This application has been examined & proposed program approved, subject to the following conditions:	APPROBATION (À L'USAGE DE LA DIRECTION) Demande étudiée et programme approuvé, sous réserve des conditions suivantes:
--	--

Regional DISTRICT CONSERVATION ENGINEER INGÉNIEUR EN CONSERVATION DU DISTRICT 		DATE 27 May 80
---	--	-------------------

SUBMIT IN TRIPLICATE TO DISTRICT CONSERVATION ENGINEER, DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT. PRÉSENTER EN TRIPLE EXEMPLAIRES À L'INGÉNIEUR EN CONSERVATION DU DISTRICT, MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN

DEPARTMENT OF INDIAN
& NORTHERN AFFAIRS
Regional Conservation Engineer
MAR 18 1980
Northern Natural Resources
& Environment Branch



NORTHERN NON-RENEWABLE RESOURCES BRANCH
DIRECTION DES RESSOURCES NON-RENOUVELABLES DU NORD

Date Issued 1980-01-25

APPLICATION FOR A DRILLING AUTHORITY
DEMANDE D'AUTORISATION DE FORAGE

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

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

Name and number of well **Westcoast et al Silt Lake G-62**

Location: Unit **G** Section **62** Grid **60° 10' 0 119° 00'**
Latitude **60° 01' 30"** Longitude **119° 12' 00"**
Unique Well Identifier **300G626010119000**
Universal Well Location Reference **60.01667°N 119.20000°W**

Proposed Target Location (if different) **Same as location**
Elevation: Ground **625m (est.)** K.B. **631m (est.)** metres above sea-level.
Water Depth (for man-made islands, ice-islands and offshore wells) **Ni**
Well is expected to produce from **the middle Devonian carbonate** formation at a depth of about **1500m to 1800** metres Expected total final depth **1915m**
Area assigned to well _____
(for District Conservation Engineer's use only)

Exploration Agreement No. * Production Licence No. *
Permit No. * Lease No. **3990D** Containing * **3885** Hectares
Permittee, licensee, or lessee **HBOG**
Exploratory Licence No. **2804 (Westcoast) 2806 (HBOG)**

Surface Owned by Crown or _____
(if alienated submit name and address of owner and occupant)
* - See attached four letters
* - See attached letter from H.W. Woodward addressing section 62 as parcel 2 which contains 9,596 acres.

We propose to use the following strings of casing either cementing or landing them as indicated below; —

Casing Size O.D. (mm)	Mass (kg/m)	Wall thickness (mm)	Grade	New or Used	Estimated Depth	Mass of Cement
1 508mm	CONDUCTOR PIPE				15m	to surface
2 244mm	53.5	8.945	K-55 (LT6C)	New	500m	48 tonnes
3						
4						
5						

Expected water, gas, and oil horizons and type of control equipment **Gas is expected throughout the middle Devonian carbonate formation. Control equipment: Two(2) single gate 203mm x 21,000 kPa L.W.P. Shaffer preventors (for pipe and blind rams), One 203mm x 21,000 kPa G.K. Hydril annular preventor, 203 x 21,000 kPa drilling spool with outlets for kill and choke lines (as per drawing).**
Well will be drilled with Rotary Rig No. **2** by **Hi-Tower Drilling**
(Drilling Contractor or company)

Responsible agent of applicant: — Contractor's Business Licence No. _____
At well **Haimi Kummer** At registered office **1100, 540-5th Avenue S.W.**
Address **Wellsite** Address **Calgary, Alberta. T2P 0M2**
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at **Calgary** this **21st** day of **January** 19 **80**
Signed by **Ron Hutzel (Ron HUTZEL)** Company **Westcoast Petroleum Ltd.**
Title **Chief Drilling Engineer** Operator's Licence No. _____

(FOR BRANCH USE ONLY)

APPROVED

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

Dated **25 Jan** 19 **80**

Regional District Conservation Engineer

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



DIRECTION DES RESSOURCES NON-RENOUVELABLES DU NORD
DEMANDE D'AUTORISATION DE FORAGE

Avant de commencer les travaux, soumettre (en triple exemplaire) et faire approuver le présent avis (indiquant l'intention d'entreprendre des travaux de forage) et, au besoin, un plan d'arpentage reconnu par l'arpenteur général, montrant l'aire de sondage ou l'emplacement du puits.

Conformément au « Règlement sur les terres pétrolifères et gazifères du Canada », nous demandons l'autorisation d'effectuer des travaux de forage.

Nom et n° du puits _____

Emplacement: Unité _____ Section _____ Étendue quadrillée _____
Latitude _____ Longitude _____
Code d'ordinateur _____
Références universelles d'emplacement du puits _____

Emplacement proposé (s'il est différent) _____

Élévation: du sol _____ du carré d'entraînement _____ mètres au-dessus du niveau de la mer.

Profondeur d'eau (pour les îles artificielles, les îles de glace et les puits en mor _____

Production prévue quand les tiges atteindront la formation _____ à une profondeur approximative de _____ mètres Profondeur totale prévue _____

Superficie assignée au puits _____
(à l'usage de l'ingénieur en conservation du district)

N° d'Accord d'exploration _____ N° de permis de production _____

N° de permis _____ N° de concession _____ Renfermant _____ hectares

Détenteur de permis ou de licence, ou concessionnaire _____

N° de permis de prospection _____

Terres appartenant à la Couronne ou à _____
(Dans le cas de terres aliénées, donner le nom et l'adresse du propriétaire et de l'occupant)

Nous prévoyons utiliser les colonnes de tubage suivantes et de les cimenter ou de les sceller, tel qu'il est indiqué ci-dessous: —

	Diamètre extérieur (en mm) de tubages	Masse (kg/m)	Épaisseur (mm)	Qualité	Tubages neufs ou usagés	Profondeur estimative	Masse de ciment
1							
2							
3							
4							
5							

Nappes d'eau, de gaz et de pétrole prévues et genre de matériel anti-éruption _____

Le puits sera foré à l'aide de la tour rotary n° _____ par _____
(Entrepreneur ou société de forage)

Agent responsable pour le requérant: — N° de permis de l'entrepreneur _____

Sur le chantier _____ Au siège _____

Adresse _____ Adresse _____

Il est entendu que, dans le cas de modifications indispensables, un avis sera soumis.

Datée — _____ le _____ 19 _____

Signé par _____ Société _____

Titre _____ N° de licence de sondage de l'exécutant _____

(DIRECTION)

APPROBATION

Demande étudiée et approuvée sous réserve des conditions suivantes:

Date _____ 19 _____ Ingénieur en conservation du district

Présenter les formules à l'ingénieur en conservation du district,
Ministère des Affaires indiennes et du Nord canadien.

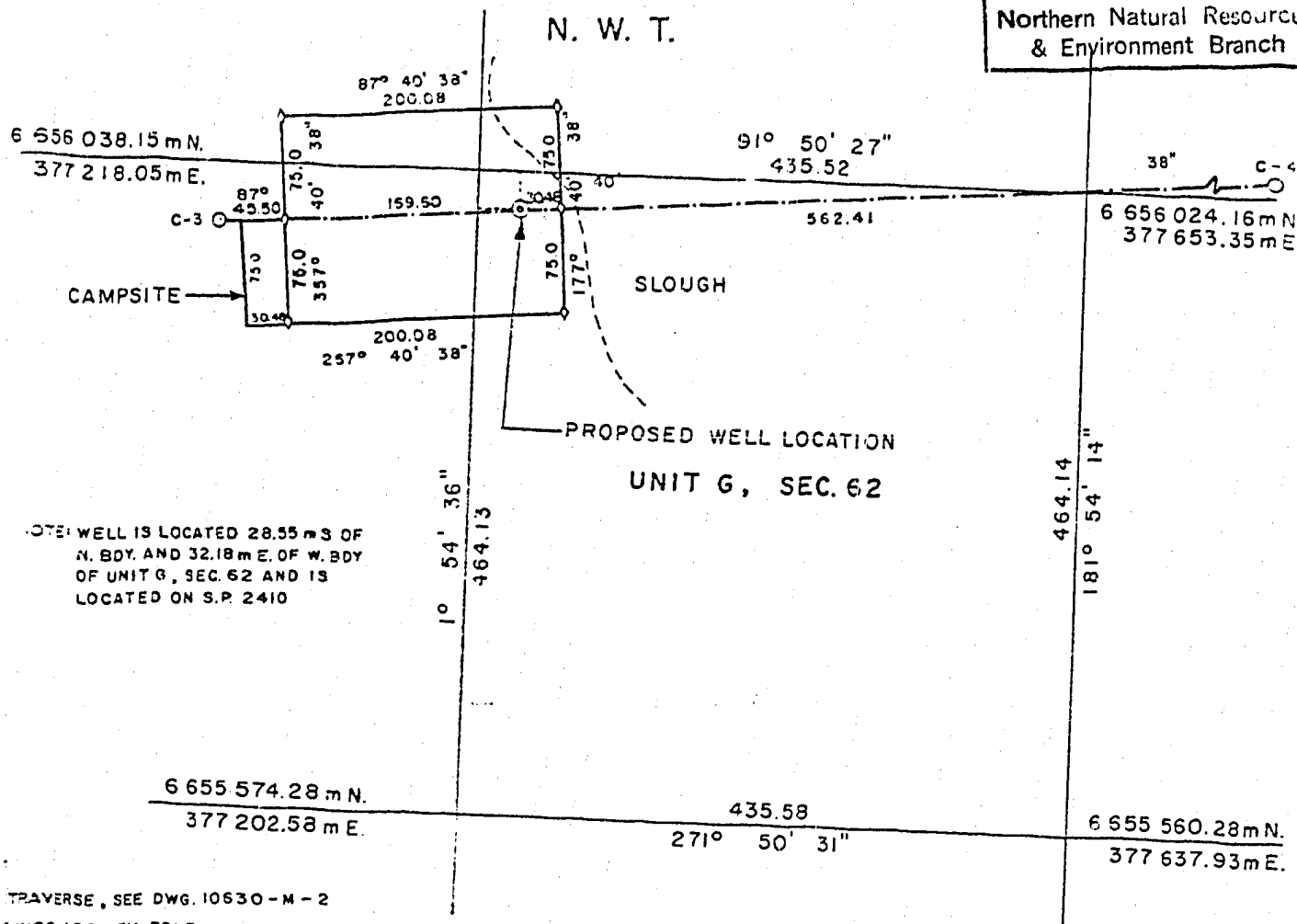
PLAN
SHOWING WELL LOCATION
WESTCOAST et al SILT LAKE
IN UNIT G., SEC. 62., G. A. 60° 10' 119° 00'

**DEPARTMENT OF INDIAN
& NORTHERN AFFAIRS**
Regional Conservation Engineer

FEB 1980

Northern Natural Resources
& Environment Branch

N. W. T.



NOTE: WELL IS LOCATED 28.55 m S OF
N. BDY. AND 32.18 m E. OF W. BDY.
OF UNIT G, SEC. 62 AND IS
LOCATED ON S.P. 2410

NOTE:

1. FOR TRAVERSE, SEE DWG. 10630-M-2
2. BEARINGS ARE UTM ZONE II
3. DISTANCES ARE IN METRES.
4. CO-ORDINATES ARE UTM ZONE II, NAD 1927.
5. SURVEY PERFORMED JAN 8 to 19, 1980.
6. STATUTORY IRON SURVEY POST PLACED SHOWN
7. IRON BARS PLACED SHOWN

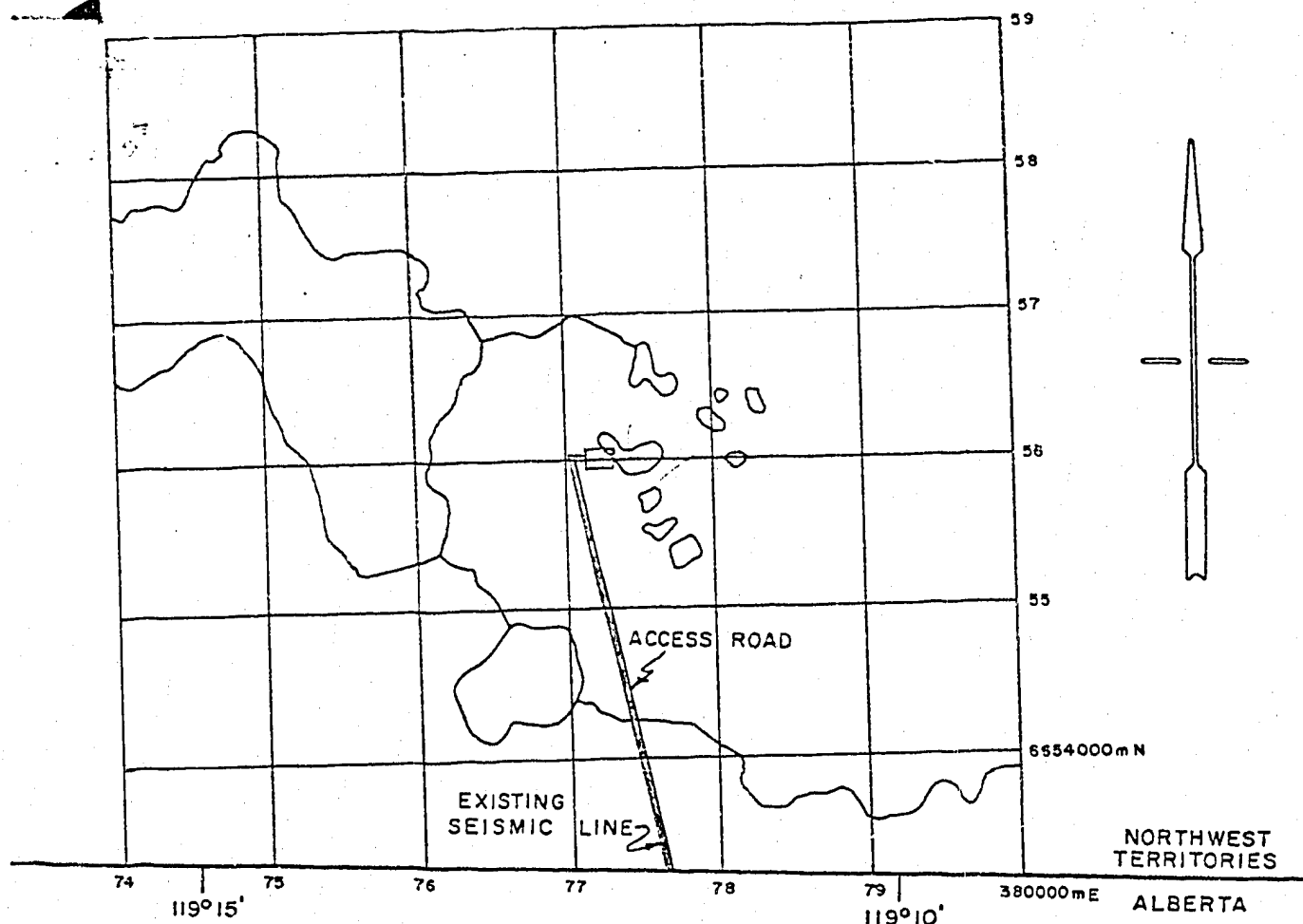
CERTIFIED CORRECT

CANADA LANDS SURVEYOR



WESTCOAST PETROLEUM LTD.

CO-ORDINATES	U.T.M. (metres) Zone II	AREAS	GEOGRAPHIC
PROPOSED WELL	N. 6 656 003.6 E. 377 249.2	WELLSITE = 3.00 ha CAMPSITE = 0.02 ha	N. LAT. : 60° 01' 29".210 W. LONG. : 119° 12' 09".175
ELEVATIONS (IN METRES)	WELL CENTRE = 608.40 N.E. CORNER = 607.95 S.W. = 607.97 S.E. = 608.30 S.W. = 608.19	TOTAL = 3.02 ha	
REF. ELEV.: 604.296			
ALTA-NWT # 361			
CANADIAN ENGINEERING SURVEYS CO. LTD. EDMONTON — ALBERTA		WELL LOCATION:	N. LAT. : 60° 02' 48" W. LONG. : 119° 20' 54.9"
SCALE: 1:5000	DATE: 24th JAN. 80	JOB NO: C-10630	DWG NO: 10630-M-1
			N.T.S. MAP SHEET: 850



WESTCOAST PETROLEUM LTD.

SKETCH PLAN SHOWING
ACCESS ROAD

IN SECTIONS 61 & 62, G.A. 60° 10', 119° 00'

NORTHWEST TERRITORIES

SCALE 1:5000

ACCESS ROAD IS 20m IN WIDTH AND APPROX 3.1 KILOMETRES IN LENGTH

WESTCOAST PETROLEUM LTD.

Ron H. P. Eng.
John G. Stacks

Canadian Engineering Surveys Co. Ltd.	DATE	JOB NO	DWG NO
10310 JASPER AVE, EDMONTON ALBERTA	JAN 30, 1980	C-10630	10630-M-3



SAMPLE DESCRIPTIONS

-4-

991-994 m	SILTSTONE	- Brown, grey-brown, with red grains, mica flakes, sandy, calcareous, tight.
994-997	SHALE	- Brown, red-brown, micaceous, fissile, silty, calcareous.
997-1002	INTERBEDDED SILTSTONE	- Light green, grey-green, sandy, calcareous, with mica flakes; shale, green, fissile, slightly calcareous.
1002-1005	SHALE	- Brown, red-brown, fissile, micaceous, silty, splintery.
1005-1007	SILTSTONE	- Red-brown, sandy, argillaceous, calcareous, with mica flakes, trace of pyrite.
1007-1013	INTERBEDDED SHALE	- Brown, red-brown, fissile, micaceous, silty; siltstone, brown, sandy, with mica flakes, slightly calcareous.
1013-1023	SHALE	- Green, grey-green, fissile, with siltstone stringers; interbedded with shale, brown, red-brown, micaceous, silty, calcareous.
1023-1025	SILTSTONE	- Light brown, sandy, argillaceous, with red grains, mica flakes, slightly calcareous.
1025-1027	SHALE	- Brown, red-brown, micaceous, calcareous, fissile, silty.
1027-1031	SILTSTONE	- Buff to light brown, sandy, with pink grains, mica flakes, calcareous; grading to sandstone, clear to white, quartz, very fine grained, subangular, well sorted, tight, silty, calcareous, with mica flakes.
1031-1044	SHALE	- Green, grey-green, micaceous, fissile, calcareous; interbedded with siltstone, light green, grey-green, sandy, argillaceous, with mica flakes.
1044-1053	INTERBEDDED SHALE	- Brown, red-brown, sandy, argillaceous, calcareous, with siltstone stringers; siltstone, brown, red-brown, sandy, argillaceous, with mica flakes.
1053-1058	SHALE	- Green, grey-green, micaceous, fissile, with siltstone stringers, calcareous, trace of pyrite.
1058-1062	SILTSTONE	- Buff to light green, sandy, argillaceous, calcareous, tight, with mica flakes, trace of pyrite.
1062-1067	SHALE	- Green, micaceous, fissile, splintery, calcareous, trace of pyrite.
1067-1071	SILTSTONE	- Light green, buff to light green, with sandstone stringers, mica flakes, slightly calcareous, trace of pyrite, minor green shale laminations.
1071-1086	INTERBEDDED SHALE	- Green, grey-green, micaceous fissile, with siltstone stringers; shale, brown, red-brown, fissile, silty, micaceous, calcareous.

1086-1088 m	SILTSTONE	- Light brown to buff, sandy, argillaceous, calcareous, with mica flakes, trace of pyrite.
1088-1098	INTERBEDDED SHALE	- Brown, grey-brown, micaceous, fissile, silty, calcareous; shale, green, grey-green, micaceous fissile, with light green siltstone stringers.
1098-1100	SILTSTONE	- Brown, argillaceous, sandy, calcareous, with abundant mica flakes.
1100-1105	INTERBEDDED SHALE	- Brown, red-brown, micaceous fissile; interbedded shale, green; siltstone, light brown, red-brown, sandy, argillaceous, micaceous, calcareous.
1105-1122	INTERBEDDED SHALE	- Green, grey-green, micaceous, fissile, calcareous; siltstone, light green, sandy, argillaceous, with mica flakes, trace of pyrite.
1122-1129	SHALE	- Brown, grey-brown, micaceous, fissile, silty, calcareous, weak; minor siltstone, brown, sandy, argillaceous, with mica flakes.
1129-1136	SILTSTONE	- Buff to light brown, with sandstone stringers, red grains, mica flakes, trace calcareous, trace brown shale partings.
1136-1141	SHALE	- Brown, red-brown, fissile, with siltstone stringers, micaceous, calcareous.
1141-1146	SILTSTONE	- Buff to light brown, sandy, argillaceous, calcareous, with mica flakes, shale partings, brown.
1146-1152	SHALE	- Green, micaceous, fissile, with siltstone stringers, calcareous.
1152-1157	SILTSTONE	- Light green, light grey to light green, sandy, argillaceous, calcareous, tight, with green shale partings, trace mica flakes.
1157-1200	INTERBEDDED SHALE	- Green, micaceous, fissile, calcareous, with trace of pyrite; siltstone, light green, sandy, argillaceous, with mica flakes, tight, calcareous, trace of pyrite.
1200-1208	SHALE	- Brown, red-brown, micaceous, fissile, sandy, silty; interbedded with shale, green, micaceous, fissile, calcareous.
1208-1210	SHALE	- Green, grey-green, micaceous, fissile, with light green, micaceous, siltstone stringers, calcareous, grading to siltstone, light green, sandy, argillaceous, calcareous, with mica flakes.
1210-1230	SHALE	- Green, brown-green, fissile, micaceous, calcareous, with brown-green siltstone stringers, calcareous, with mica flakes.
1230-1300	SHALE	- Green, brown-grey, fissile, splintery, calcareous, with a trace of brown, siltstone stringers, calcareous, micaceous, tight.

1300-1325 m	SHALE	- Green, grey-green, fissile, calcareous, splintery, trace of siltstone stringers.
1325-1340	SHALE	- Brown, green-brown, fissile, calcareous, splintery, trace of siltstone stringers.
1340-1370	SHALE	- Green, fissile, calcareous, trace silty, splintery, minor shale brown.
1370-1376	SHALE	- Brown, green-brown, fissile, calcareous, trace silty, trace of pyrite.
1376-1386	SHALE	- Green, grey-green, fissile, calcareous, trace silty.
1386-1400	SHALE	- Brown, green-brown, micaceous, fissile, bulky, trace calcareous.
1400-1475	SHALE	- Green, bulky, fissile, calcareous, micaceous, trace silty, trace of pyrite.
1475-1504	SHALE	- Green, bulky, calcareous, fissile, splintery; shale, brown-black, bulky, bit, trace of pyrite.
1504-1518	SHALE	- Dark brown, bituminous, bulky, trace silty, trace of pyrite.

SLAVE POINT 1518 m (-905 m)

1518-1520	LIMESTONE	- Medium brown, cryptocrystalline matrix, massive, dense, scattered crinoid and brachiopod fragments, bituminous, pyritic; minor limestone, light green-grey, cryptocrystalline, massive, argillaceous.
1520-1530	LIMESTONE	- Brown, cryptocrystalline, massive, dense, scattered, stromatoporoid and amphipora fragments, trace bituminous, trace of stylolites, trace of pyrite; minor chert, grey-brown, cryptocrystalline, calcareous.
1530-1535	LIMESTONE	- Light brown, cryptocrystalline to coarse crystalline matrix, massive stromatoporoid fragments, amphipora, brachiopods, trace of pyrite, stylolites.
1535-1546	LIMESTONE	- Brown, calcilutite, cryptocrystalline matrix, lime mud with scattered stromatoporoid and bioclastic debris, trace of pyrite, trace bituminous, trace of stylolites.
1546-1548	LIMESTONE	- Light grey to light brown, calcarenite, pellets, stromatoporoid fragments, bioclastic debris, slightly bituminous, pyritic, trace of stylolites.
1548-1555	LIMESTONE	- Tan to buff, cryptocrystalline, massive, dense, tight, trace of fossil fragments, trace of pellets.
1555-1569	LIMESTONE	- Medium to light brown, calcarenite, 35% pellets, 20% stromatoporoids, 20% bioclastic debris, coarse grained, bituminous, trace of stylolites; interbedded with limestone, light to medium brown, cryptocrystalline, massive, tight, scattered pellets.

SAMPLE DESCRIPTIONS

-7-

1569-1589 m LIMESTONE - Tan to buff, cryptocrystalline matrix, massive, dense, tight, with scattered pellets, non-descript algae material, trace of pyrite.

WATT MOUNTAIN 1589 m (-976 m)

1589-1591 SHALE - Apple green, waxy, splintery, soft, pyritic; minor limestone, tan to light grey, cryptocrystalline matrix, trace of pyrite, trace fractures.

SULPHUR POINT 1591 m (-978 m)

1591-1595 INTERBEDDED - Tan to buff, 80% pellets, matrix partly cemented
CALCARENITE with clear calcite, 5% interpelletoidal porosity; limestone, tan to buff, microcrystalline, massive, dense, tight, hard, scattered pellets.

1595-1602 LIMESTONE - Tan to buff, cryptocrystalline matrix, massive, dense, tight, scattered pellets; minor calcarenite buff, pellets, and rounded bioclastic debris, matrix partly cemented with calcite.

1602-1605 LIMESTONE - Pelletoidal calcarenite, buff to tan, fine to medium grained, pellets subrounded bioclastic debris, matrix partly cemented with clear calcite, 10% interpelletoidal porosity.

1605-1625 LIMESTONE - Cream to white, tan, matrix cryptocrystalline, massive, dense, tight, scattered pellets, ostracods, fossil debris, trace of pyrite.

1625-1670 LIMESTONE - White to cream, cryptocrystalline matrix, massive, dense, tight, trace fractures, scattered pellets, fossil debris, trace of pyrites.

KEG RIVER 1670 m (-1057 m)

1670-1690 DOLOMITE - Buff to light grey, very fine to fine grained, massive, partly leached, trace to 10% intercrystalline and vuggy porosity, trace of white drusy dolomite in vugs.

1690-1705 DOLOMITE - Buff to light brown, fine grained, dolarenite, massive, 10% intercrystalline and intervuggular porosity, trace of pyrite.

1705-1723 DOLOMITE - Light to medium brown, very fine to fine grained dolarenite, with scattered intercrystalline and vuggular porosity, trace to 6% porosity, trace of pyrite.

1723-1725 DOLOMITE - Light to dark brown, fine to medium grained, 15% intergranular and vugular porosity, indistinct strom-toporoid remains, trace of pyribituminous material in vugs.

1725-1736 DOLOMITE - Grey-brown dolosiltite, massive, dense, tight, with minor zones of intercrystalline porosity, trace to 5% intercrystalline porosity.

1736-1754 m	Continued....	stromatoporoids, <u>15-20% intercrystalline and inter-vugular porosity</u> , trace of pyrobituminous material in vugs.
1754-1760	DOLOMITE	- Brown, grey-brown, dolosiltite, massive, dense, bituminous, tight, scattered crinoids, trace of pyrite, trace bituminous.
<u>LOWER KEG RIVER 1760 m</u>		
1760-1765	LIMESTONE	- Medium to dark brown, microcrystalline matrix, massive, dense, tight, argillaceous, 4% dolomite, scattered brachiopod fragments, trace of pyrite.
1765-1785	LIMESTONE	- Dark brown, cryptocrystalline, massive, tight, argillaceous, scattered fossil fragments, trace of pyrite, trace bituminous shale laminations.
1785-1793	LIMESTONE	- Brown, grey-brown, microcrystalline to cryptocrystalline matrix, massive, dense, tight, argillaceous, scattered brachiopods, crinoids, trace of pyrite.
<u>CHINCHAGA 1793 m (-1180 m)</u>		
1793-1801	DOLOMITE	- Light brown microcrystalline to cryptocrystalline matrix, massive, dense, tight, with anhydrite inclusions brown crystalline, minor anhydrite buff cryptocrystalline
1801-1804	ANHYDRITE	- Buff to light brown, cryptocrystalline, massive, dense, dolomitic, tight.
1804-1806	DOLOMITE	- Light brown to buff, microcrystalline, matrix, tight, dense, with light brown anhydrite stringers.
1806-1817	ANHYDRITE	- Buff to light brown, cryptocrystalline, massive, dense, tight, with light brown dolomite stringers.
1817-1835	INTERBEDDED DOLOMITE	- Light brown to light grey, cryptocrystalline to microcrystalline, massive, dense, trace of anhydrite stringers and inclusions; anhydrite, buff to light grey, cryptocrystalline matrix, massive, dense, dolomitic.
1835-1837	SHALE	- Green, grey-green, splintery, dolomitic, trace sandy.
1837-1839	ANHYDRITE	- Light grey, light green to light grey, cryptocrystalline, argillaceous, dolomitic, trace of green shale laminations.
<u>GRANITE WASH 1839 m</u>		
1839-1848	INTERBEDDED SHALE	- Green, splintery, sandy, silty; sandstone, white, arkosic, fine to medium grained, subangular to subrounded medium sorted, partly friable, matrix cemented with kaolin, trace of feldspar, clear quartz granules.
1848-1853	SANDSTONE	- White to pink arkosic, fine to coarse grained, subangular to subrounded, well sorted, partly friable, matrix cemented with kaolin and silica, trace of red shale stringers.

SAMPLE DESCRIPTIONS

-9-

1853-1856 m

- Interbedded red and green waxy shale, with sand grains.

1856-1863

SANDSTONE

- Buff to pink arkosic, very fine to coarse grained, subangular to subrounded, medium to poorly sorted, matrix partly cemented with kaolin, silica, scattered clear quartz granules, mica flakes, weathered feldspar.

PRECAMBRIAN 1863 m (-1850 m)

1863-1885

GRANITE

- Pink to green, mottled, hard, dense, massive, quartz, biotite, feldspar, partly weathered, trace of shale, green-red, waxy, sandy.

NOYES SUPERVISION (1978) LTD.

GEOLOGICAL RECORD

WELL WESTCOAST ET AL SILT LAKE G-62

LOCATION 60° 01' 29.21" N, 119° 12' .9 1.75" W

FIELD

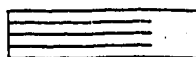
GD. ELEVATION 608.4 m

KB. ELEVATION 613.0 m

DATE 80 02 24

PREPARED BY J.W. FULTON

LEGEND



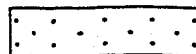
SHALE



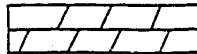
LIMESTONE



ANHYDRITE



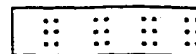
SANDSTONE



DOLOMITE



GRANITE



SILTSTONE



CLAY



DEPTH	DRILLING TIME min./m.	OIL SHOW	POROSITY TYPE	EX GOOD FAIR POOR	LITHOLOGY	CRYSTAL OR GRAIN SIZE	BOUNDING SORTING	DESCRIPTION	ENG. DATA
	2 6 10 14 24 30								

500m

MBL

525m

537
DNA.

550m

575m

600m

625m

sh m-lt qy, mica fis, splty, wk, sl calc.

sh lt-m qy, mica fis, wk, sl calc, tr splty.

sh qy, qn-qy, mica fis, sl calc, wk.

sh lt-m qy, mica, fis, wk, splty, tr calc.

sh lt-qy-m qy, mica fis, wk, splty, tr calc.

sh m-lt qy, mica, fis, wk, sl calc.

ls cem-bf, micl, mass dns, tr Ost, Crin, sl dol.

ls cem, micl, mass, sl dol, tr fos deb.

ls cem-buff, micl, chky, Ost, Crin, fos deb, sl dol, sl arg.

ls cem, cepxl, mass dns, scat fos frag.

ls cem, cepxl, mass, dns, scat fos deb, sl dol, tr argl.

ls cem-fan, micl, cepxl, mass, dns in pt, scat Ost, fos deb, tr bit.

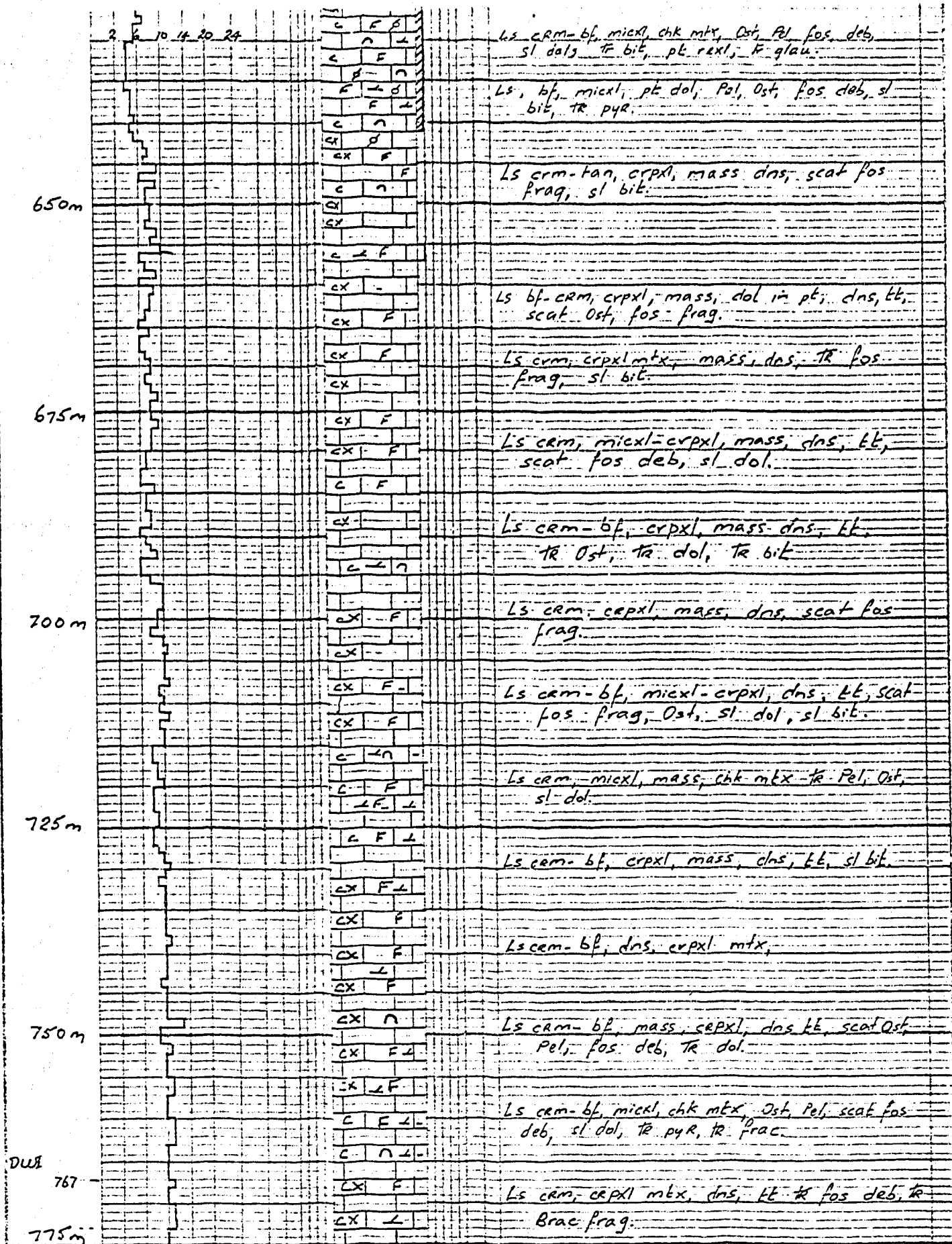
ls cem-bf, micl, spl, tr rex, Ost, Pel, Biocl, dol, sl dol, sl bit.

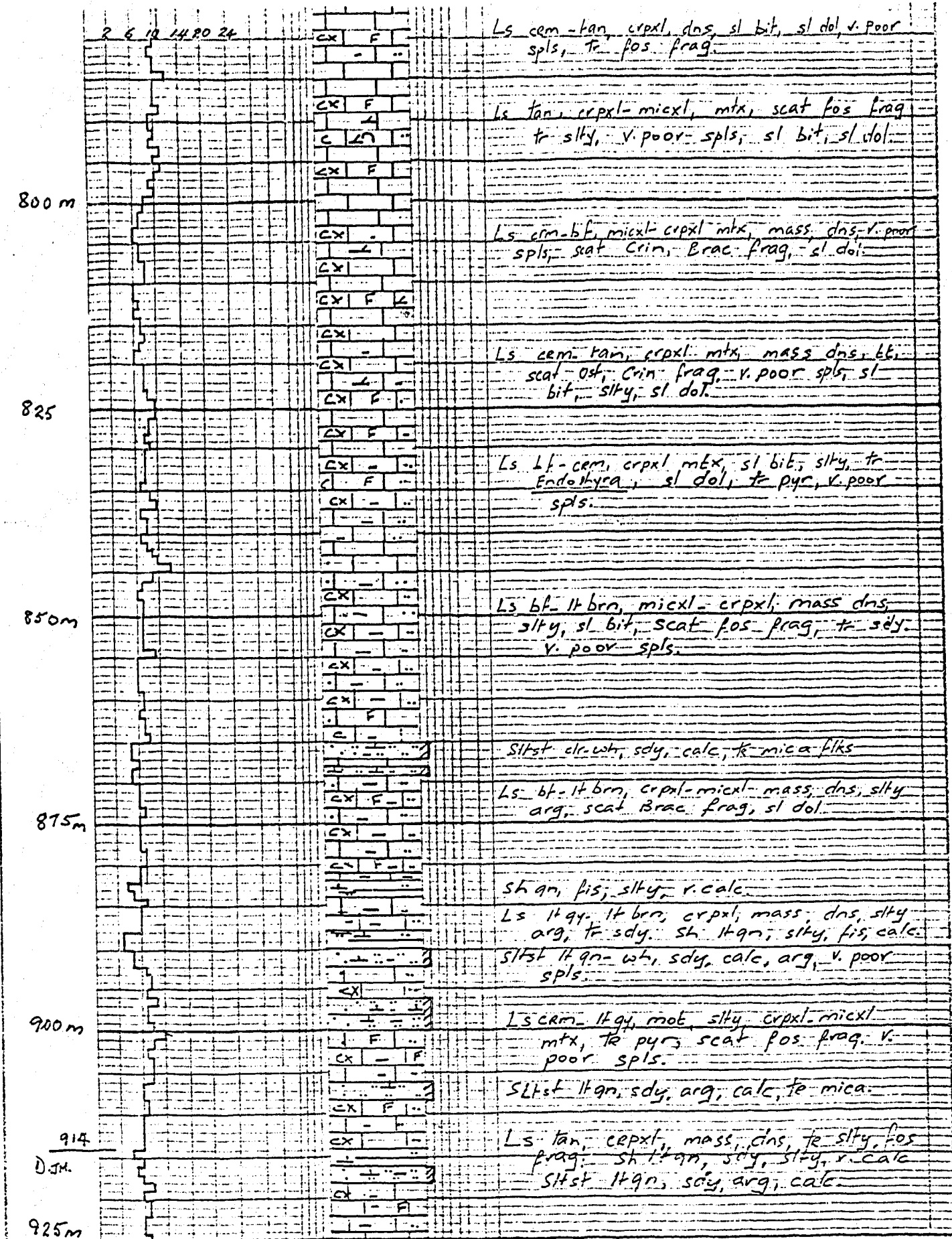
ls cem, micl, cepxl, mass, scat fos frag, mtr pt, chky, sl dol.

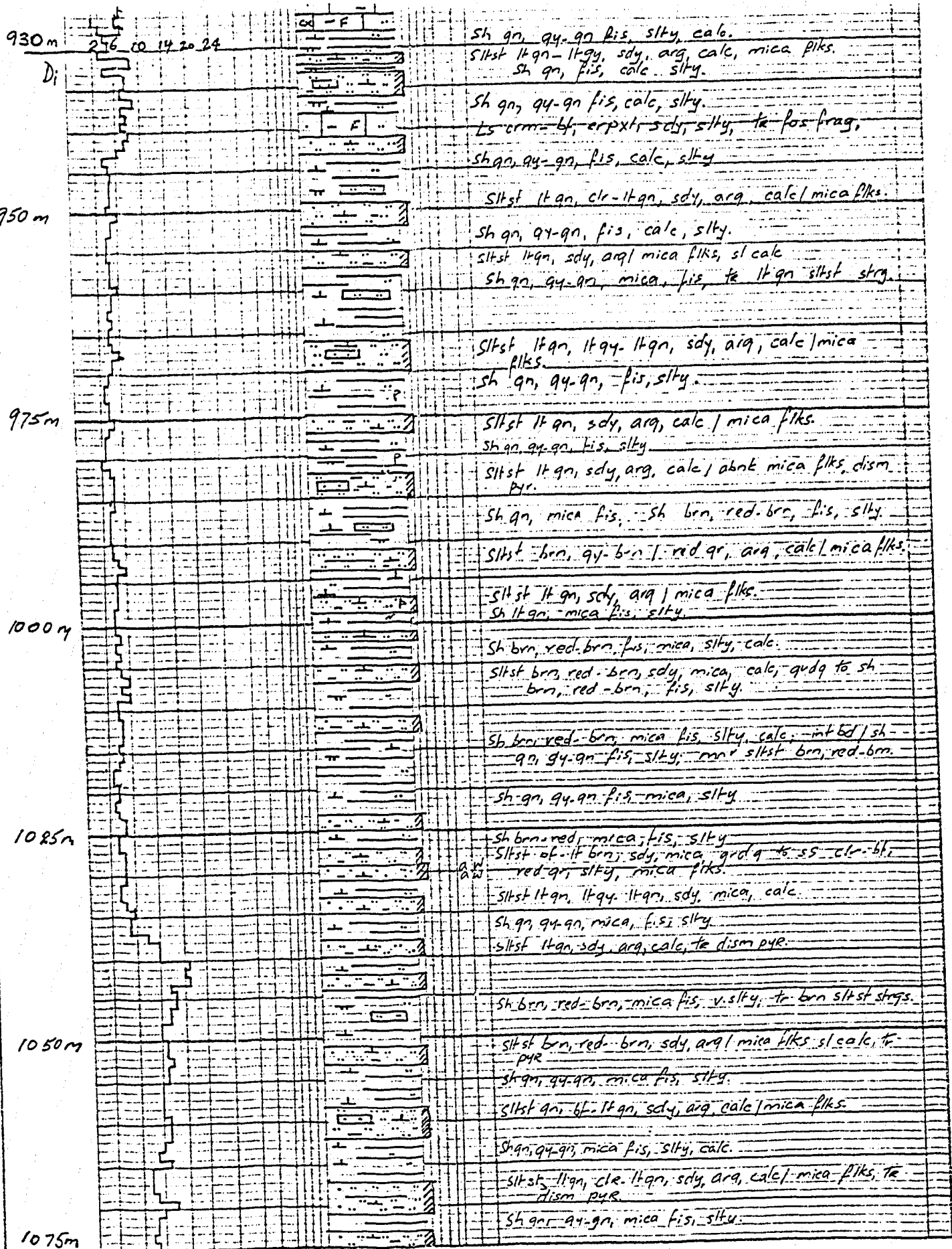
ls cem-fan, micl, cepxl, mass, scat Ost, Brac, tr Pel, sl dol, tr bit.

ls cem, micl, cepxl, mass, pt rex, scat Pel, Ost, mtr pt, chky, sl dol, sl bit, sl arg.

ls cem-fan, cepxl, mass, dns, sl dol, tr fos deb.







1100m

1125m

1150m

1175m

1200m

1225m

2 6 10 14 20 24

Siltst-ltqn, sdy, arg / mica flks, st calc.

Sh brn, red-brn, mica fis, slty, int bc / sh qn, fis, calc.

Shqn, brn-qn, mica fis, slty.

sh qn, brn-qn, fis, calc, te siltst strgs.

Siltst brn, qy-brn, sdy, arg, calc / dbnt mica flks.

Siltst lt brn, sdy, arg, calc / mica flks, te pyr.

Sh qn, mica fis, slty, calc

Siltst ltqn, sdy, arg, calc / mica flks.

Sh qn, qn-qn, mica fis, slty, calc, te pyr.

Siltst bf-ltqn, sdy, arg / mica flks, calc, te.

Sh qn, qy-qn, mica fis, slty, te pyr.

Siltst brn, red-brn, sdy, arg, calc / mica flks.

Sh brn, qy-brn, mica fis, slty, wk, spity, te siltst strgs.

Siltst lt-ltqn, sdy, arg, calc, seat red gr, brn-red sh lam, mica flks.

Sh brn, red-brn, fis, spity, mica / siltst strgs, mnr sh brn-qn, mica fis, slty.

Siltst bf-ltqn, arg / ss strgs; brn sh lam st calc, mica flks.

sh qn, mica fis.

Siltst ltqn, lt qy-ltqn / mica flks, ss strgs, calc, mnr qn mica sh phs, te dism pyr.

Siltst ltqn, bf-ltqn, sdy, arg, calc / mica flks te pyr.

Sh qn, qy-qn mica fis, calc.

Siltst bf-ltqn, sdy, arg / mica flks.

Siltst ltqn, lt qy-ltqn, sdy, arg, calc / mica flks.

Sh qn, brn-qn, mica fis, slty, te pyr.

Sh qn, mica fis, mnr siltst bf-ltqn, sdy arg, calc / mica flks.

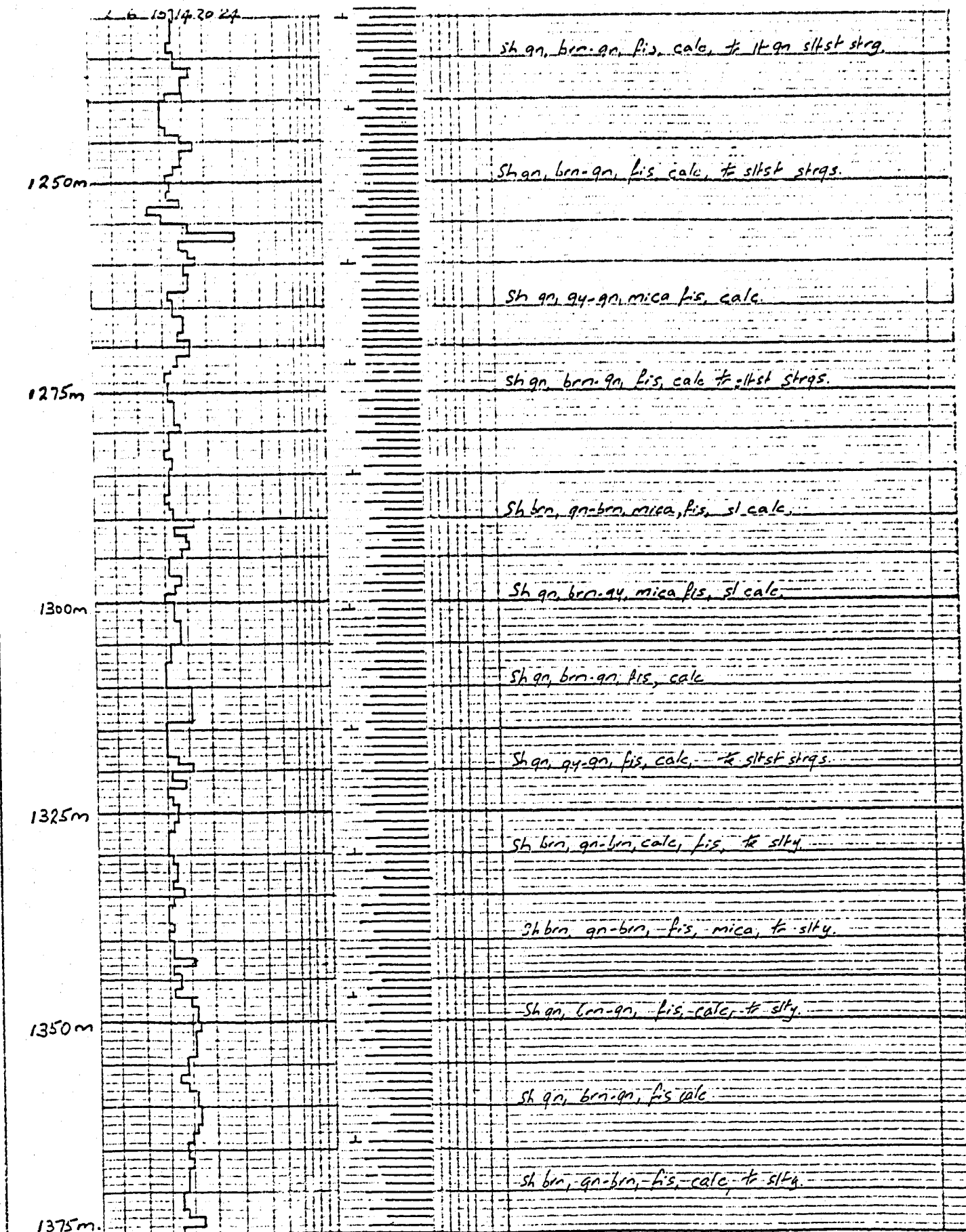
Siltst ltqn, bf-ltqn, sdy / mica flks.

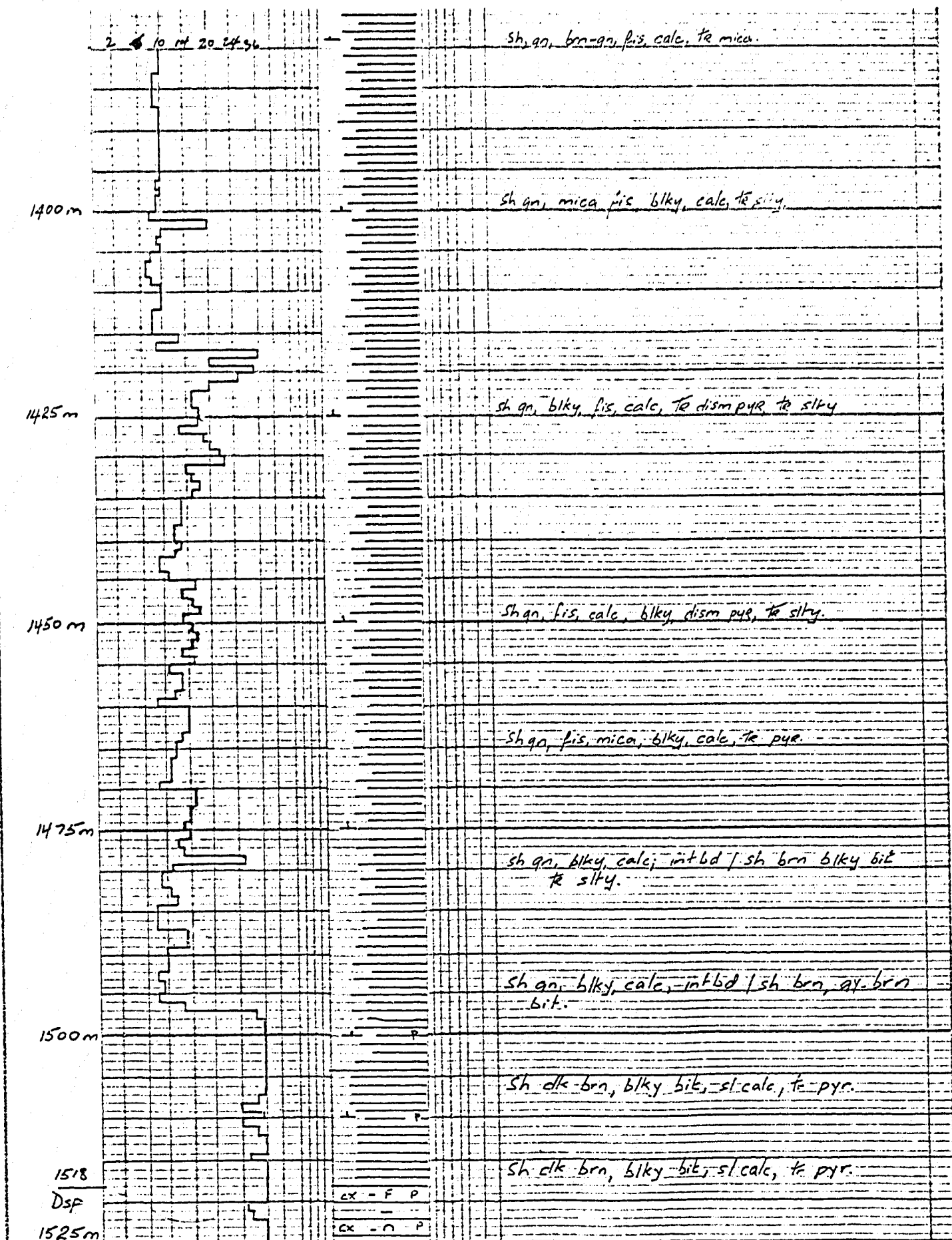
Sh brn, red-brn, mica fis, slty.

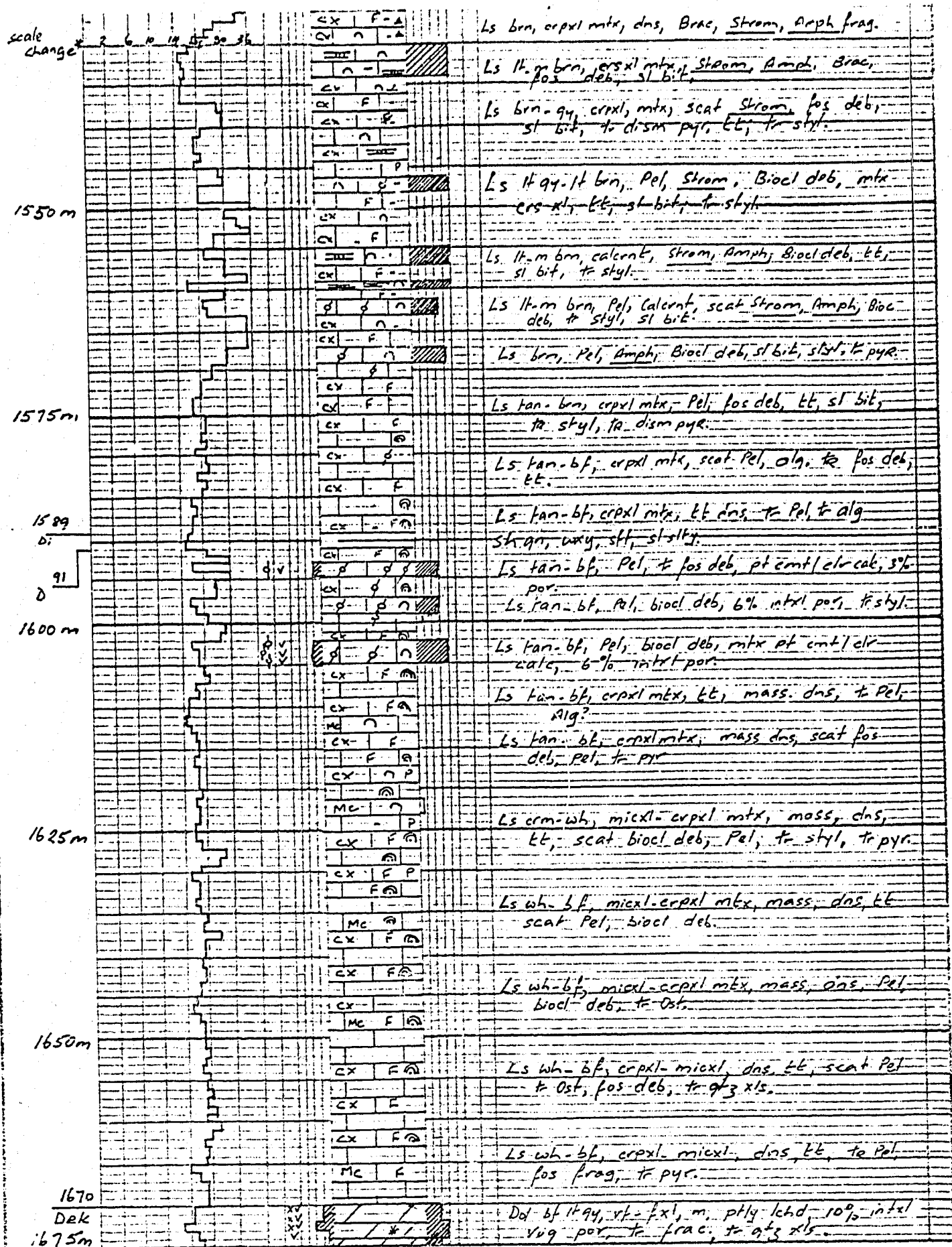
Sh qn, mica fis, calc.

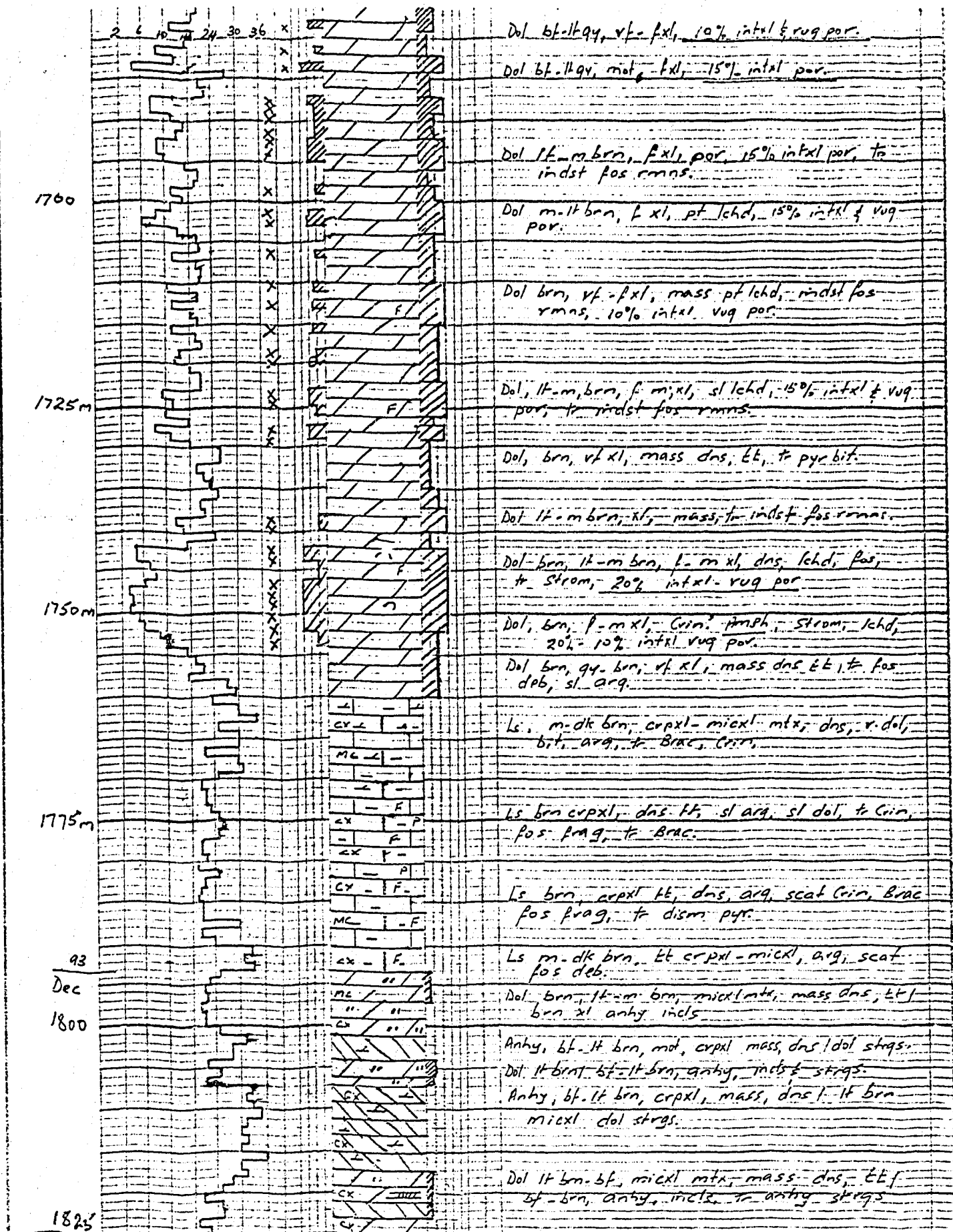
Siltst ltqn, bf-ltqn, sdy / mica flks.

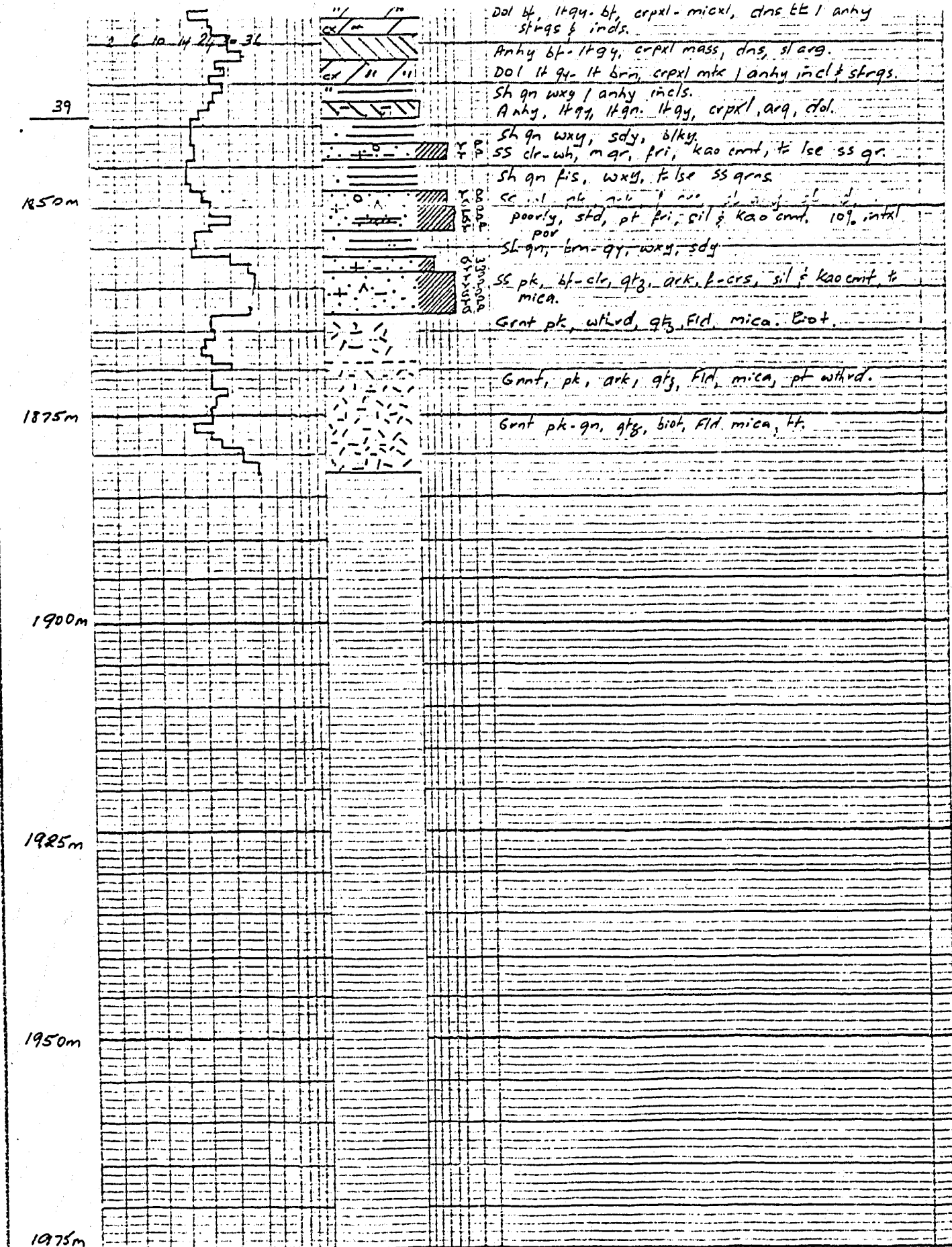
sh qn, mica fis, calc te siltst strgs.











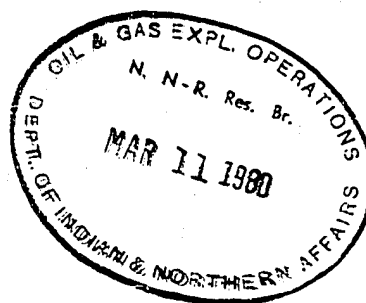
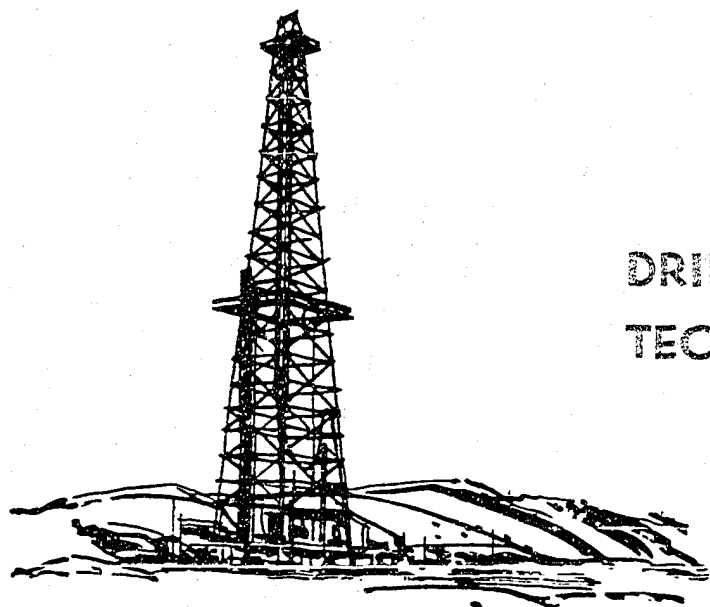
WESTCOAST PETROLEUM LTD.
COMPANY NAME
WESTCOAST ET AL SILT LAKE
WELL NAME
60.300-119.120
LOCATION

YR. MO. DAY
80 02 23
DATE
1
DST No.

LYNES

BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



**DRILL STEM TEST
TECHNICAL SERVICE REPORT**

NOMENCLATURE (Definition of Symbols)

- Q = average production rate during test, m³/d
 Q_R = measured gas production rate during test, m³/d
 k = permeability, md
 h = net pay thickness, m (when unknown, test interval is chosen)
 μ = fluid viscosity, mPa-s
 Z = compressibility factor
 T_r = reservoir temperature, °Kelvin
 m = slope of final SIP buildup plot, kPa/cycle (kPa²/cycle for gas)
 b = approximate radius of investigation, metres
 r_w = wellbore radius, metres
 t_0 = total flowing time, minutes
 P_0 = Extrapolated maximum reservoir pressure, kPa
 P_f = final flowing pressure, kPa
 $P.I.$ = productivity index, m³/kPa-d
 $P.I._t$ = theoretical productivity index with damage removed, m³/kPa-d
 $D.R.$ = damage ratio
 $E.D.R.$ = estimated damage ratio
 AOF = absolute open flow potential, m³/D
 AOF_t = theoretical absolute open flow if damage were removed
 Z = subsea depth, metres
 μ = viscosity

INTERPRETATION CALCULATIONS (OIL/WATER)

AVERAGE PRODUCTION RATE DURING TEST

$$Q = \frac{1440(\text{drill collar capacity} \times \text{recovery} + \text{drill pipe capacity} \times \text{recovery})}{\text{initial flow time} + \text{final flow time}}$$

$$= \frac{1440 \left[\left(\frac{1}{1} \right) \left(\frac{1}{1} \right) + \left(\frac{1}{1} \right) \left(\frac{1}{1} \right) \right]}{\left(\frac{1}{1} \right) + \left(\frac{1}{1} \right)}$$

$$= 1440 \left(\frac{1}{1} \right) = \frac{1440}{1} = 1440 \text{ m}^3/\text{day}$$

Mud Expansion = $\frac{1}{1}$ m
(Drill Collar Conversion is Considered)

FLUID PROPERTIES Estimated Bottom Hole Temperature = $\frac{1}{1}$ °C

API Gravity @ 289°K = $\frac{1}{1}$ Specific Gravity @ 289°K = $\frac{1}{1}$ Est Viscosity = $\frac{1}{1}$ mPa-s

TRANSMISSIBILITY

$$\frac{k h}{\mu} = \frac{2.49 \times 350}{1} = \frac{872.5}{1} = 872.5 \text{ md-m/mPa-s}$$

IN SITU CAPACITY

$$k h = \left(\frac{1}{1} \right) \left(\frac{1}{1} \right) = \frac{1}{1} \text{ md-m}$$

AVERAGE EFFECTIVE PERMEABILITY Estimated Pay Thickness = $\frac{1}{1}$ m
Actual Pay Thickness = $\frac{1}{1}$ m

$$k = \left(\frac{1}{1} \right) = \frac{1}{1} \text{ md}$$

PRODUCTIVITY INDEX

$$P.I. = \frac{Q}{P_0 - P_f} = \frac{\left(\frac{1}{1} \right)}{\left(\frac{1}{1} \right) - \left(\frac{1}{1} \right)} = \frac{1}{1} \text{ m}^3/\text{mPa-d}$$

DAMAGE RATIO

$$D.R. = \frac{0.183(P_0 - P_f)}{m} = \frac{0.183 \left(\frac{1}{1} - \frac{1}{1} \right)}{\left(\frac{1}{1} \right)} = \frac{1}{1}$$

PRODUCTIVITY INDEX WITH DAMAGE REMOVED

$$P.I._t = P.I. \times D.R. = \left(\frac{1}{1} \right) \times \left(\frac{1}{1} \right) = \frac{1}{1} \text{ m}^3/\text{mPa-d}$$

APPROXIMATE RADIUS OF INVESTIGATION

$$b = 0.3048 \sqrt{\frac{k h}{\mu}} = \sqrt{\left(\frac{1}{1} \right) \left(\frac{1}{1} \right)} = \frac{1}{1} \text{ m}$$

Drawdown Factor = $\frac{15(P_0 - P_f)}{15(P_0 - P_f)} \times 100 = \frac{1}{1} \times 100 = \frac{1}{1} \% \left(\begin{array}{l} 4\% \text{ to } 5\% \text{ is} \\ \text{considered serious} \\ \text{or substantial} \end{array} \right)$

INTERPRETATION CALCULATIONS (GAS)

ESTIMATED GAS PROPERTIES $R(T_g) = \frac{1}{1}$
Gravity @ 289°K = $\frac{1}{1}$ Viscosity (Res) = $\frac{1}{1}$ mPa-s Estimated Bottom Hole Temperature = $\frac{1}{1}$ °C
Compressibility Factor (Z) = $\frac{1}{1}$

TRANSMISSIBILITY Measured D.S.T. Gas Rate = $\frac{1}{1}$ m³/d

$$\frac{k h}{\mu} = \frac{1516.9 Q_R Z T_r}{m} = \frac{1516.9 \left(\frac{1}{1} \right) \left(\frac{1}{1} \right) \left(\frac{1}{1} \right)}{\left(\frac{1}{1} \right)} = \frac{1}{1} \text{ md-m/mPa-s}$$

IN SITU CAPACITY

$$k h = \left(\frac{1}{1} \right) \left(\frac{1}{1} \right) = \frac{1}{1} \text{ md-m}$$

AVERAGE EFFECTIVE PERMEABILITY Estimated Pay Thickness = $\frac{1}{1}$ m
Actual Pay Thickness = $\frac{1}{1}$ m

$$k = \left(\frac{1}{1} \right) = \frac{1}{1} \text{ md}$$

APPROXIMATE RADIUS OF INVESTIGATION

$$b = 0.00232 \sqrt{\frac{k h}{\mu}} = \sqrt{\left(\frac{1}{1} \right) \left(\frac{1}{1} \right)} = \frac{1}{1} \text{ m}$$

ACTUAL CAPACITY

$$k h = \frac{3000 Q_R Z T_r \log(0.472 r_e)}{P_0^2 - P_f^2} = \frac{3000 \left(\frac{1}{1} \right) \left(\frac{1}{1} \right) \left(\frac{1}{1} \right) \log \left(\frac{1}{1} \right)}{\left(\frac{1}{1} \right)^2 - \left(\frac{1}{1} \right)^2} = \frac{1}{1} \text{ md-m}$$

DAMAGE RATIO $E.D.R. = \frac{(P_0^2 - P_f^2)}{m \log 2} = \frac{1}{2.551}$

$$D.R. = \frac{\text{In Situ Capacity}}{\text{Actual Capacity}} = \frac{\left(\frac{1}{1} \right)}{\left(\frac{1}{1} \right)} = \frac{1}{1} \quad E.D.R. = \frac{1}{1}$$

ESTIMATED RANGE OF AOF POTENTIAL

$$\text{Max AOF} = \frac{Q_R P_0^2}{P_0^2 - P_f^2} \left(\frac{1}{1} - \frac{1}{1} \right) = \frac{1}{1} \text{ m}^3/\text{d}$$

$$\text{Min AOF} = \frac{Q_R P_0^2}{\sqrt{P_0^2 - P_f^2}} \left(\frac{1}{1} - \frac{1}{1} \right) = \frac{1}{1} \text{ m}^3/\text{d}$$

ESTIMATED RANGE OF AOF POTENTIAL DAMAGE REMOVED

$$\text{Max AOF}_t = (\text{Max AOF}) (D.R.) = \left(\frac{1}{1} \right) \left(\frac{1}{1} \right) = \frac{1}{1} \text{ m}^3/\text{d}$$

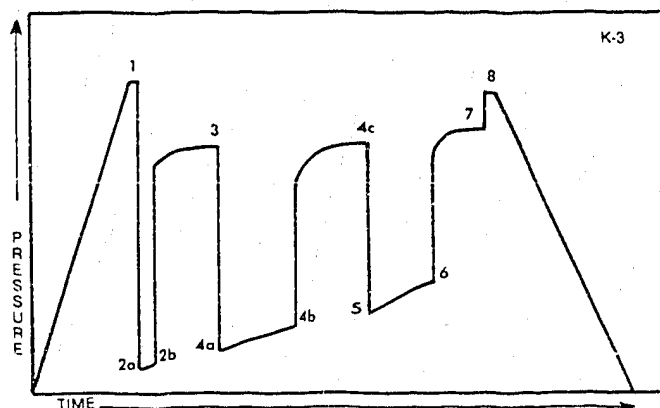
$$\text{Min AOF}_t = (\text{Min AOF}) (D.R.) = \left(\frac{1}{1} \right) \left(\frac{1}{1} \right) = \frac{1}{1} \text{ m}^3/\text{d}$$

Drawdown Factor = $\frac{15(P_0 - P_f)}{15(P_0 - P_f)} \times 100 = \frac{1}{1} \times 100 = \frac{1}{1} \% \left(\begin{array}{l} 4\% \text{ to } 5\% \text{ is} \\ \text{considered serious} \\ \text{or substantial} \end{array} \right)$

GUIDE TO INTERPRETATION AND IDENTIFICATION OF LYNES DRILL STEM TEST PRESSURE CHARTS

In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.

AK-1 recorders. Read from right to left.



1. INITIAL HYDROSTATIC MUD PRESSURE
2. PRE-FLOW
3. INITIAL SHUT-IN
- 4a. 2nd INITIAL FLOW
- 4b. 2nd FINAL FLOW
- 4c. 2nd SHUT-IN
5. 3rd INITIAL FLOW
6. FINAL FLOW
7. FINAL SHUT-IN
8. FINAL HYDROSTATIC MUD PRESSURE

K-3 recorders. Read from left to right.

N.B. When only two shut-in and flow periods are run, 4a, 4b and 4c are omitted.

Typical charts for visual field analysis ranging from virtually no — excellent perm.



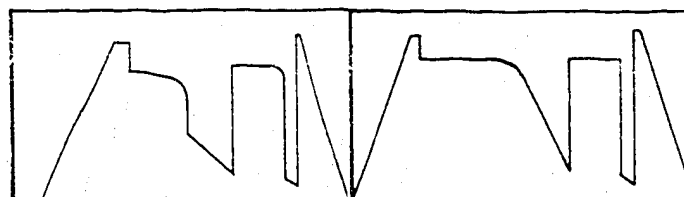
Virtually no permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Very low permeability. Again usually mud recovered.

Low permeability. Small recovery, less than 60 m.

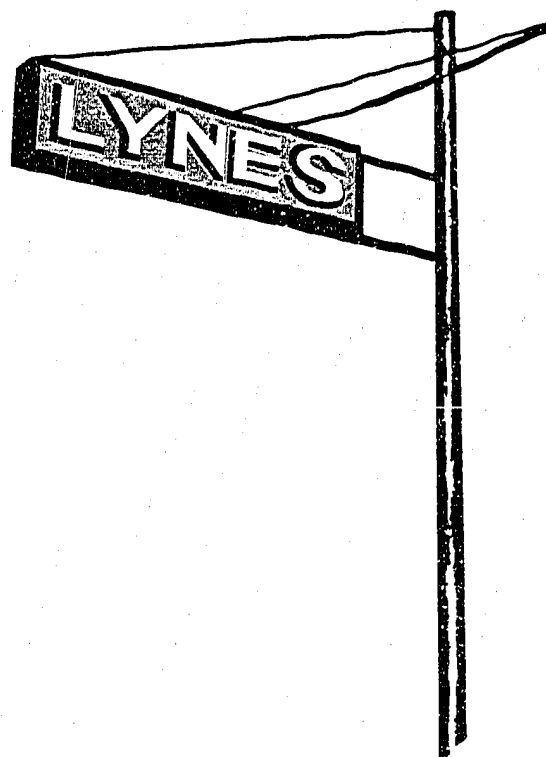
Relatively low permeability. Final and initial shut-ins differ by 344.7 kPa.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



High permeability where ISIP and FSIP are within 68.9 kPa.

Excellent permeability where final flow and final shut-in pressure are equal.



LYNES UNITED SERVICES LTD.

232-1735

CALGARY, ALBERTA

LYNES UNITED SERVICES LTD.

DRILLSTEM TEST SUMMARY REPORT

Date: 80 02 23

Well name: WESTCOAST ET AL SILT LAKE G-62
Location: 400/ 60.300 / 119.120 / 00

Licence no. 01760
Ticket no. 40176

DST number 001 LYNES test #1 Test number 1 of 1 (on same trip)
Test type: INFLATE STRADDLE

Kelly pushing (M): 613.00 Ground elevation (M): 608.40
Interval from (M): 1670.00
 to (M): 1687.00 Total depth (M): 1877.00

Formation: KEG RIVER

TIME AND PRESSURE DATA

Recorder #009487

	TIMES (min)	PRESSURES (kPa)	:		TIMES (min)	PRESSURES (kPa)
1st flow	20.	3242.0	:	2nd flow	60.	3558.0
		3550.0	:			7004.0
1st shutin	60.	13095.0	:	2nd shutin	120.	13163.0
			:			
3rd flow			:	4th flow		
			:			
3rd shutin			:	4th shutin		
			:			
Initial hydrostatic		17606.0	:	Final hydrostatic		17606.0

GENERAL REMARKS

The test results indicate a mechanically successful test; bottom hole pressures and the shape of the shut-in curves suggest AVERAGE PERMEABILITY within the interval tested.
Tool opened momentarily when trying to deflate packers at end of test; this did not affect the test results.
Charts indicate slight plugging on preflow.
Recorder #9495 - doesnot return to baseline; pressures invalid.

LYNES UNITED SERVICES LTD.

TEST RECOVERY DATA

Blow description:

Weak air blow on preflow, steadily increasing to fair to bottom of pail in 5 minutes, no gas to surface.

Weak air blow on valve opening, steadily increasing to fair to bottom of pail in 4 minutes, no gas to surface.

GAS MEASUREMENTS:

Measured with: NO GAS-INSTR AVAILABLE

Riser (mm):

TIME (min)	SURF. CHOKE (mm)	READING (kPa)	CUBIC METRES/D
------------	------------------	---------------	----------------

NO GAS
MEASUREMENTS

Liquid recovery:

For DST# 1 through DST# 1

Amount (M) Of

60.00 INHIBITOR WATER.
85.00 OIL FLECKED SALT WATER CUT MUD.
502.00 SULPHUROUS SALT WATER.
85.00 GAS CUT MUD.

Total recovery (M): 732.00

Reversed out: NO

Salinity (g/M3): 37500.

Bottom hole sampler#

Sent to:

Gas bomb#

Sent to:

No. of fluid samples: 4

Sent to: C & G

GENERAL DATA

Inhibitor : Inhibitor amount (M):
Cushion type: Liquid amount (M):
Gas pressure (kPa):

Started in hole: 1730.00 Hrs.
Opened tool at: 2250.00 Hrs.

MUD AND HOLE DATA

Hole condition @ test time: FAIR
Conditioned prior to test: YES

Calipered hole size @ test depth (mm) 247.0

Mud type:	GEL CHEMICAL	Mud weight (kg/M ³):	1080.00
Viscosity (sec/l):	80.0	Water loss (cm ³):	9.5
Filter cake (mm):	1.5	Log temperature (C):	56.0
		Recorder temperature (C):	

Pipe size (mm)	Type	Weight (kg/M)
114.3	NO DP-TYPE AVAILABLE	24.70

Collar size (mm)	Type	Int. diameter (mm)	Length (M)
171.0	NO DP-TYPE AVAILABLE	77.0	107.35

BTM choke size (mm):	25.4	
Rat hole size (mm):		Rat hole length (M):
Main hole size (mm):	222.2	

Total number of packers run: 2

Mailing Data

Company:	WESTCOAST PETROLEUM LTD.	
Address:	11TH FLOOR /	
	540 - 5TH AVE. S.W.	Reports sent to: AL KOSTYNIUK
	CALGARY, ALBERTA	

Number of Reports: 5

WELL NAME: WESTCOAST ET AL SILT LAKE G-62

WELL LOCATION: 60.300 / 119.120

DST NUMBER: 001

RECORDER NUMBER: 009487

INTERVAL TESTED: 1670.00M TO 1687.00M

RECORDER DEPTH: 1672.00M

TOTAL FLOW TIME: 20.MIN

FIRST SHUT IN PRESSURE (LIQUID)

TIME (MIN) PHI	(T+PHI) /PHI	PRESSURE (KPa)
.0	.0000	3550.0
5.0	5.0000	9609.0
10.0	3.0000	11867.0
15.0	2.3333	12299.0
20.0	2.0000	12434.0
25.0	1.8000	12595.0
30.0	1.6667	12697.0
35.0	1.5714	12798.0
40.0	1.5000	12875.0
45.0	1.4444	12942.0 *
50.0	1.4000	13002.0 *
55.0	1.3636	13052.0 *
60.0	1.3333	13095.0 *

* VALUES USED IN HORNER ANALYSIS

SLOPE: 4401.52449 KPa/CYCLE

EXTRAPOLATED PRESSURE: 13645.0 KPa

HORNER PLOT

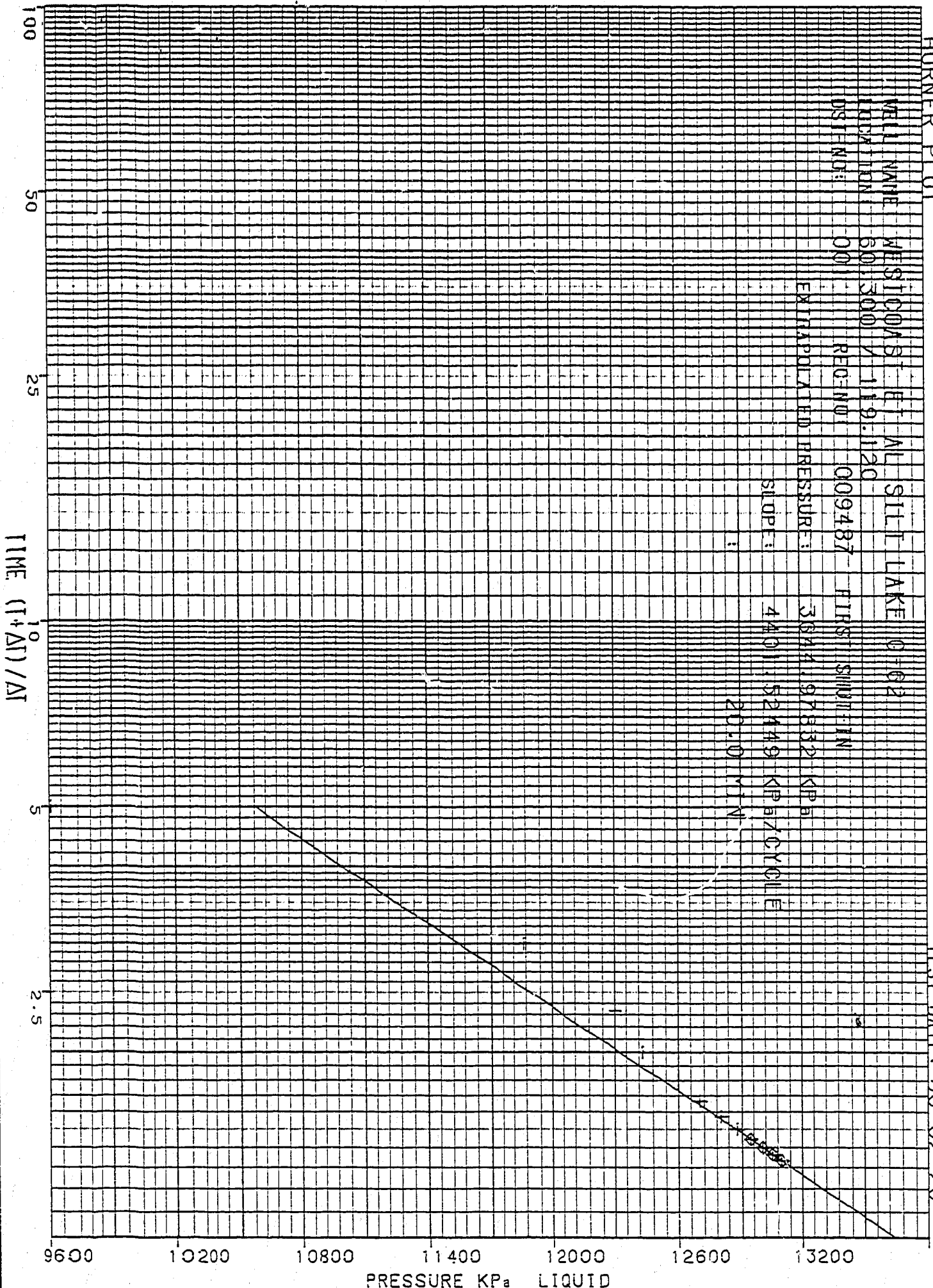
TEST DATE: 80 02 23

WELL NAME WESTCOAST ET AL SILT LAKE 0-62
 LOCATION 6013000 N 119.120
 DST NO: 001 REC NO: 009487 FIRST SHUT-IN

EXTRAPOLATED PRESSURE: 3644.97632 KPa

SLOPE: 4401.52449 KPa/CYCLE

20.0 MIN



WELL NAME: WESTCOAST ET AL SILT LAKE G-62
WELL LOCATION: 60.300 / 119.120
DST NUMBER: 001
RECORDER NUMBER: 009487
INTERVAL TESTED: 1670.00M TO 1687.00M
RECORDER DEPTH: 1672.00M
TOTAL FLOW TIME: 80.MIN

FINAL SHUT IN PRESSURE (LIQUID)

TIME (MIN) PHI	(T+PHI) /PHI	PRESSURE (KPa)
.0	.0000	7004.0
5.0	17.0000	10977.0
10.0	9.0000	11536.0
15.0	6.3333	11824.0
20.0	5.0000	12019.0
25.0	4.2000	12180.0
30.0	3.6667	12307.0
35.0	3.2857	12426.0
40.0	3.0000	12551.0
45.0	2.7778	12682.0
50.0	2.6000	12697.0
55.0	2.4545	12765.0
60.0	2.3333	12824.0
65.0	2.2308	12883.0
70.0	2.1429	12925.0
75.0	2.0667	12968.0
80.0	2.0000	13002.0
85.0	1.9412	13036.0
90.0	1.8889	13069.0 *
95.0	1.8421	13086.0 *
100.0	1.8000	13118.0 *
105.0	1.7619	13129.0 *
110.0	1.7273	13146.0 *
115.0	1.6957	13154.0 *
120.0	1.6667	13163.0 *

* VALUES USED IN HORNER ANALYSIS

SLOPE: 1781.52942 KPa/CYCLE

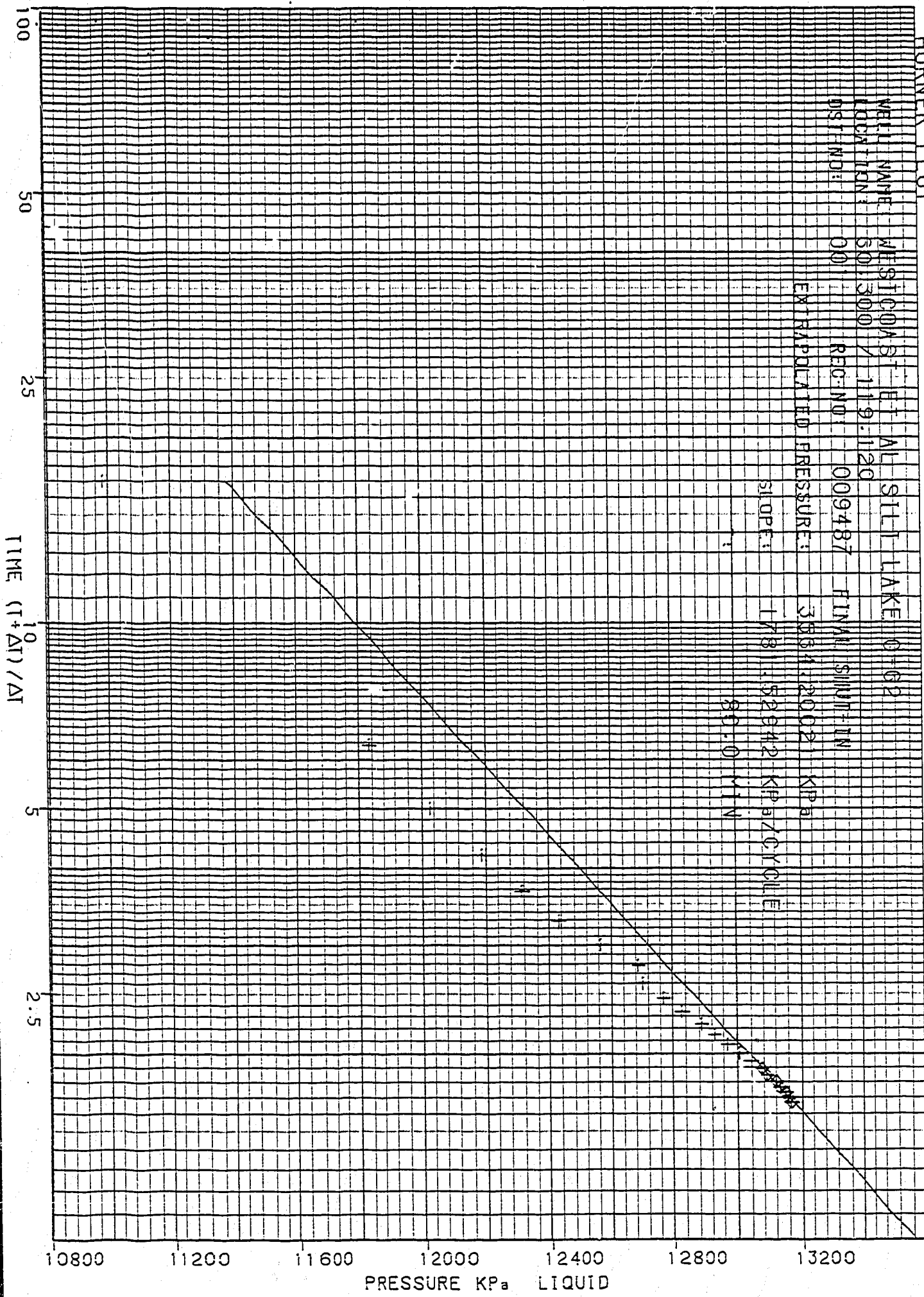
EXTRAPOLATED PRESSURE: 13564.2 KPa

HORNER PLOT

TEST DATE: 80 02 23

WELL NAME: WESTCOAST ET AL SALT LAKE 0-62
 LOCATION: 501300 / 119.120
 DIST NO: 001
 REC NO: 009487
 FINAL SHUT-IN

EXTRAPOLATED PRESSURE: 3554.20021 KPa
 SLOPE: 1781.52942 KPa/CYCLE
 80.0 MIN



PRESSURE KPa LIQUID

LYNES UNITED SERVICES LTD.

RECORDER PAGE

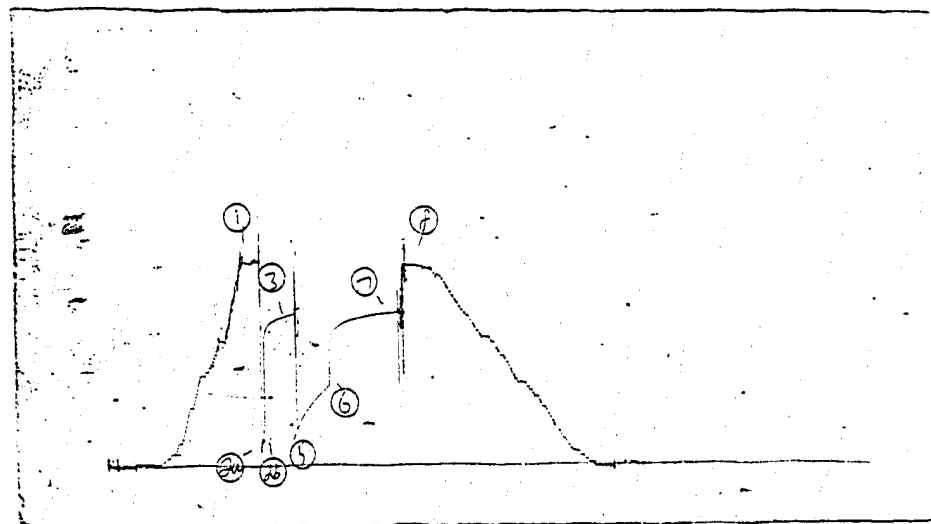
WELL NAME : WESTCOAST ET AL SILT LAKE G-62
 LOCATION : 400/ 60.300 / 119.120 / 00
 DST NUMBER : 001

RECORDER NUMBER: 009015 TYPE: K-3
 DEPTH : 1663.00 m INSIDE/OUTSIDE: INSIDE
 CAPACITY : 40334.00 kPa

	TIMES (MIN)	PRESSURES (kPa)
		2369.00
1ST. FLOW	20.	3333.00
SHUTIN	60.	13064.00
		3055.00
2ND. FLOW	60.	6780.00
SHUTIN	120.	13149.00

INITIAL HYDROSTATIC: 17586.0

FINAL HYDROSTATIC: 17586.0



LYNES UNITED SERVICES LTD.

RECORDER PAGE

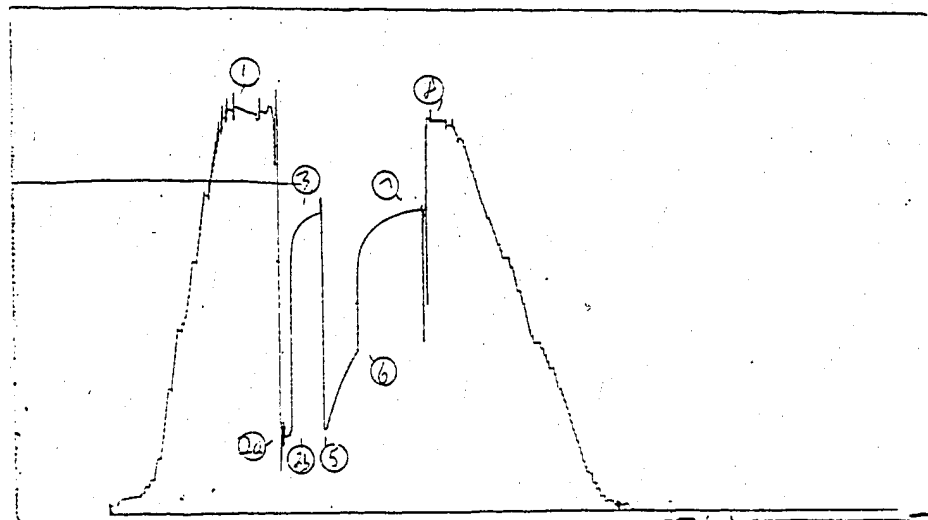
WELL NAME : WESTCOAST ET AL SILT LAKE G-62
 LOCATION : 400/ 50.300 / 119.120 / 00
 DST NUMBER : 001

RECORDER NUMBER: 009487 TYPE: K-3
 DEPTH : 1672.00 m INSIDE/OUTSIDE: OUTSIDE
 CAPACITY : 20684.00 kPa

	TIMES (MIN)	PRESSURES (kPa)
1ST. FLOW SHUTIN		3242.00
	20.	3550.00
	60.	13095.00
2ND. FLOW SHUTIN		3558.00
	60.	7004.00
	120.	13163.00

INITIAL HYDROSTATIC: 17606.0

FINAL HYDROSTATIC: 17606.0



LYNES UNITED SERVICES LTD.

RECORDER PAGE

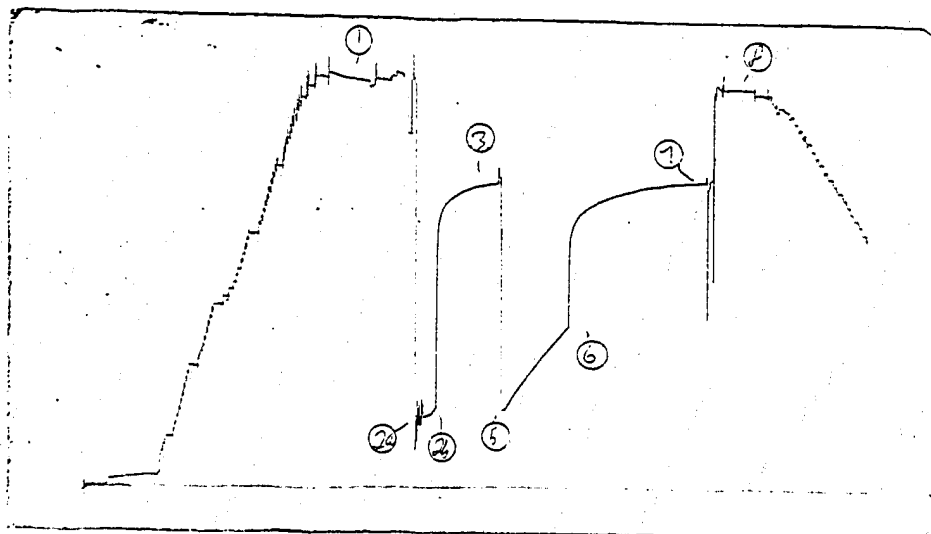
WELL NAME : WESTCOAST ET AL SILT LAKE G-62
 LOCATION : 400/ 50.300 / 119.120 / 00
 DST NUMBER : 001

RECORDER NUMBER: 009495 TYPE: K-3
 DEPTH : 1672.00 m INSIDE/OUTSIDE: OUTSIDE
 CAPACITY : 21029.00 kPa

	TIMES (MIN)	PRESSURES (kPa)
1ST. FLOW		3092.00
	20.	3509.00
	60.	13772.00
SHUTIN		
		3374.00
	60.	7185.00
2ND. FLOW		
	120.	13789.00
SHUTIN		

INITIAL HYDROSTATIC: 18683.0

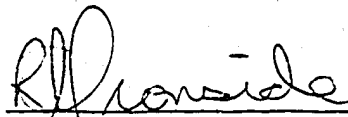
FINAL HYDROSTATIC: 18683.0



FINAL WELL REPORT

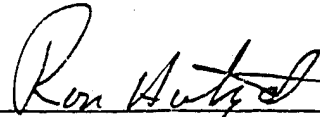
WESTCOAST et al SILT LAKE G-62

COMPILED BY:

A handwritten signature in cursive script, appearing to read "R. J. Ironside", written over a horizontal line.

R. J. Ironside

SUBMITTED BY:

A handwritten signature in cursive script, appearing to read "R. J. Hutzel", written over a horizontal line.

R. J. Hutzel
Chief Drilling Engineer

TABLE OF CONTENTS

	Page
I INTRODUCTION	1
II GENERAL WELL DATA	2
III ENGINEERING SUMMARY	3
a) Drill Stem Tests	3
b) Casing Record	3
c) Tubing Details	3
d) Mud Record	3
e) Bit Record	3
f) Deviation Record	3
g) Report of Blowout	3
h) Lost Circulation Zones	3
IV ABANDONMENT SUMMARY	8
V WEATHER CONDITIONS	8
VI GEOLOGICAL SUMMARY	
a) Formation Tops	9
b) Cored Intervals	9
c) Sample Descriptions	10
VII ANALYSIS	10
VIII LOGGING SUMMARY	10

I. INTRODUCTION

The Westcoast et al Silt Lake G-62 exploratory well was drilled to a depth of 1877m K.B. (1264m subsea). The well failed to encounter commercially recoverable hydrocarbons and was therefore abandoned. This report is intended to provide a summary of information pertaining to the drilling of this well as required by the Canada Oil and Gas Drilling Regulations Section 228., Subsection (2).

II. GENERAL WELL DATA

a. Well Name: Westcoast et al Silt Lake G-62

b. Drilling Authority No: 951

c. Exploration Agreement No.: 2804 - Westcoast Petroleum Ltd.
2806 - Hudson's Bay Oil & Gas Ltd.

d. Permit No.: N79A181

e. Lease No.: 3990D

f. Operator: Westcoast Petroleum Ltd.

g. Drilling Contractor: Hi Tower Drilling Ltd.
Rig No. 2

h. Location: Unit G, Section 62, Grid 60° 10' @ 119° 00'
Latitude 60° 01' 30" N Longitude 119° 12' 00" W

i. Universal Well Location
Reference: 60.01667°N 119.20000°W

j. Unique Well Identifier: 300 G62 6010119000

k. Elevations: K.B. 613m
Grd. 208.4m

l. Status: Dry and abandoned

m. Total Depth: 1877m K.B.

n. Date Spudded: 80-01-27

c. Date Drilling Completed: 80-02-21

p. Date Drilling Rig Released: 80-02-27

III ENGINEERING SUMMARY

a. Drill Stem Tests:

<u>Drill Stem Test #</u>	<u>Date</u>	<u>Interval (m K.B.)</u>	<u>Formation</u>
DST #1	80-02-23	1687-1670	Keg River

b. Casing Record:

<u>Casing</u>	<u>Size (mm)</u>	<u>Length (m)</u>	<u>Weight (kg/m)</u>	<u>Grade</u>	<u>Make</u>	<u>Setting Depth (m K.B.)</u>	<u>Cement Details</u>
Conductor pipe	508mm					15m	to surface
Surface	244mm	496.43	53.57	K-55		495	Cemented with 55.42 tonnes class "G" + 2% CaCl ₂ -3.5m ³ returns

c. Tubing Details:

nil

d. Mud Record:

as attached; p. 4

e. Bit Record:

as attached; p. 5

f. Deviation Record:

as attached; p. 6

g. Report of Blowout:

nil

h. Lost Circulation Zones:

nil

DRILLING HISTORY

△

WELL: WESTCOAST ET AL SILT LAKE G-62

DATE _____

[illegible]

BIT RECORD

WELL NAME & LOCATION: WESTCOAST PETROLEUM ET AL SULT
 OPERATOR: WESTCOAST PETROLEUM AREA: NORTH BISTCHO
 CONTRACTOR: HI TOWER II PROVINCE: NWT

[illegible]

WESTCOAST et al SILT LAKE

G-62

N.W.T.

Lat. $60^{\circ}10'$ Long. $119^{\circ}0'$ DEVIATION SURVEY

<u>DEPTH (m)</u>	<u>INCLINATION ($^{\circ}$)</u>
33	0
80	1/4
105	1/4
130	0
148	3/4
184	3/4
212	1/4
240	1/2
264	1/2
296	1/2
325	1
353	1
381	1
410	Mis run
419	3/4
447	Mis run
466	1/2
556	1/2
622	1/2
688	3/4
772	1/2
841	1/4
897	1/4
962	1/8



WESTCOAST et al SILT LAKE

G-62

N.W.T.

Lat. $60^{\circ}10'$ Long. $119^{\circ}0'$ DEVIATION SURVEYS Contd...

<u>DEPTH (m)</u>	<u>INCLINATION ($^{\circ}$)</u>
1028	1 1/2
1066	1 1/8
1103	1 1/2
1149	1
1205	2
1233	2 1/2
1253	2
1281	2
1309	1 1/2
1347	1 1/2
1375	1
1412	1
1449	1
1487	2 3/4
1506	2
1525	1 3/4
1544	2
1562	Mis run
1572	1 3/4
1600	1 3/4
1628	1 1/2
1666	1 3/4
1681	1 1/2
1722	1 1/2
1797	1 1/2



IV ABANDONMENT SUMMARYa. Plugging Record:

<u>Plug No.</u>	<u>Depth (m K.B.)</u>		<u>Cementing Details</u>	<u>Plug Down</u>	<u>Log Depth (m K.B.)</u>
	<u>Top</u>	<u>Bottom</u>			
1	1877	- 1775	7.5 tonnes "G" plus 0.03% HR4	80-02-25 13:30	Felt @ 1762m with 3000 daN; 80-02-25 1930
2	1610	- 1500	7.5 tonnes "G" plus 0.03% HR4	80-02-25 21:30	Felt @ 1443m with 3000 daN; 80-02-26 0330
3	950	- 790	12.4 tonnes neat "G"	80-02-25 07:45	Felt @ 764m with 3000 daN; 80-02-26 1430
4	550	- 450	11.4 tonnes "G" plus 2.0% CaCl ₂ across casing shoe	80-02-26 15:45	Felt @ 424m with 3000 daN; 80-02-26 1545
5	29	- 1	1.8 tonnes "G"	80-02-26 23:30	Surface plug

The surface casing was cut off 1m below ground level, a steel cap was welded on it. A 50mm pipe was welded to the cap. This stake extends 1.5m above ground. A plate bearing the well name (Silt Lake G-62) and location (longitude and latitude) has been welded to the stake. The plate was painted orange.

V WEATHER CONDITIONS

<u>Date</u>	<u>Temperature</u>	<u>Winds</u>	<u>Visibility</u>
80-01-27	-32°C	Calm	Clear
80-01-28	-31°C	Calm	Clear
80-01-29	-20°C	Calm	Good
80-01-30	-18°C	Calm	Clear
80-01-31	-22°C	25 km/hr.	Overcast
80-02-01	-22°C	Calm	Clear
80-02-02	-12°C	Calm	Clear
80-02-03	-12°C	Calm	Clear
80-02-04	- 8°C	Calm	Clear
80-02-05	-15°C	Calm	Clear
80-02-06	- 9°C	Calm	Clear
80-02-07	- 8°C	Calm	Clear
80-02-08	- 5°C	Calm	Clear

V WEATHER CONDITIONS (Con't)

<u>Date</u>	<u>Temperature</u>	<u>Winds</u>	<u>Visibility</u>
80-02-09	-20°C	Calm	Clear
80-02-10	-21°C	Calm	Clear
80-02-11	-12°C	Calm	Clear
80-02-12	-18°C	Calm	Clear
80-02-13	-18°C	Calm	Clear
80-02-14	-20°C	Calm	Clear
80-02-15	-14°C	Calm	Overcast
80-02-16	-18°C	Calm	Clear
80-02-17	-10°C	5 km/hr.	Overcast
80-02-18	-24°C	5 km/hr.	Clear
80-02-19	-30°C	15km/hr.	Clear
80-02-20	-28°C	Calm	Overcast
80-02-21	-24°C	Light	Overcast
80-02-22	-22°C	Calm	Clear
80-02-23	-26°C	Calm	Clear
80-02-24	-16°C	Calm	Clear
80-02-25	-20°C	25km/hr.	Clear
80-02-26	-16°C	Calm	Clear
80-02-27	-12°C	Calm	Clear

VI GEOLOGICAL SUMMARY

a. Formation Tops:

	<u>K.B. Depth (m)</u>	<u>Subsea Elevation (m)</u>
Wabamum	537.0m	+76.0m
Winterburn	767.0m	154.0m
Jean Marie (Nisku)	915.0m	302.0m
Ft. Simpson (Ireton)	930.0m	317.0m
Slave Pt.	1518.0m	905.0m
Watt Mountain	1588.0m	975.0m
Sulphur Point	1590.0m	977.0m
Keg River	1670.0m	1057.0m
Lower Keg River	1760.0m	1147.0m
Chinchaga	1790.0m	1177.0m
Granite Wash	1833.0m	1220.0m
Pre Cambrian	1873.0m	1260.0m

b. Cored Intervals:

Nil

c. Sample Descriptions:

as attached; p. 11

VII ANALYSIS

- a. Core Analysis: Nil
- b. Gas Analysis: Nil
- c. Oil Analysis: Nil
- d. Water Analysis: Lab No. F80-1397-1 (attached p. 31)
F80-1397-2
F80-1397-3
F80-1397-4
- e. Static Bioassay: Lab No. EB-80-322 (attached p. 33)

VIII LOGGING SUMMARY

<u>Log</u>	<u>Run No.</u>	<u>Interval</u>
DILL	1	1876-495
SONIC	1	1876-495
CNL-FDC	1	1876-1450
Mud Gas Log	1	1885-495

SAMPLE DESCRIPTIONS

<u>DEPTH</u>	<u>DESCRIPTIONS</u>	
500-525 m	SHALE	- Light to medium grey, micaceous, fissile, weak splintery, slightly calcareous; minor shale, light green, micaceous, weak.
525-537	SHALE	- Light to medium grey, micaceous, fissile, weak, trace of plant remains, trace calcareous; minor light green micaceous shale, slightly calcareous.
<u>WABAMUN 537 m (+ 71 m)</u>		
537-539	LIMESTONE	- Cream to buff, chalky matrix, massive, dense, slightly dolomitic, scattered crinoids, ostracods, fossil debris, trace argillaceous.
539-547	LIMESTONE	- Cream to buff, cryptocrystalline matrix, massive dense, hard, trace of fossil debris, brachiopod fragments, slightly dolomitic.
547-551	LIMESTONE	- Cream, chalk matrix, massive, scattered ostracods, brachiopods, fossil fragments, trace dolomitic, matrix partly crystallized.
551-565	LIMESTONE	- Cream, buff to tan, cryptocrystalline, massive, dense, trace of nondescript algae, trace of pyrite.
565-621	LIMESTONE	- Cream to buff, microcrystalline to cryptocrystalline, massive, dense, tight, slightly bituminous, trace of fossil fragments, trace of ostracods.
621-641	LIMESTONE	- Cream, microcrystalline, chalk matrix, scattered ostracods, pellets, slightly dolomitic, trace argillaceous, trace bituminous.
641-680	LIMESTONE	- Cream to buff, cryptocrystalline, massive, dense, tight, scattered ostracods, trace of fossil fragments, slightly dolomitic.
680-695	LIMESTONE	- Cream, microcrystalline, chalk matrix, massive, tight, slightly dolomitic, trace of crinoids, ostracods, brachiopod fragments, trace bituminous.
695-715	LIMESTONE	- Cream to buff, cryptocrystalline, chalk matrix, massive, dense, tight, trace of fossil debris, slightly bituminous.
715-730	LIMESTONE	- Cream to buff, microcrystalline, chalk matrix, massive, scattered ostracods, pellets, fossil debris, slightly dolomitic, trace of glauconite.
730-767	LIMESTONE	- Tan to cream, cryptocrystalline to microcrystalline matrix, scattered fossil fragments, trace of dolomite, slightly bituminous, very poor samples.

SAMPLE DESCRIPTIONS

12

WINTERBURN 767 m (-154 m)

767-778 m	LIMESTONE	- Cream to buff, cryptocrystalline matrix, massive, dense, tight, trace of fossil fragments, trace of siltstone, very poor samples.
778-812	LIMESTONE	- Tan to buff, cryptocrystalline to microcrystalline, massive, dense, scattered fossil fragments, silty in part, bituminous in part, very poor samples, trace dolomitic.
812-830	LIMESTONE	- Buff, cryptocrystalline, massive, dense, tight, scattered, brachiopod, and fossil fragments, trace dolomitic.
830-865	LIMESTONE	- Buff, cryptocrystalline to microcrystalline matrix, massive, dense, silty, slightly bituminous, scattered fossil fragments, trace pyrite, very poor samples.
865-869	SILTSTONE	- Clear to tan, sandy, argillaceous, dolomitic, trace of mica flakes; minor limestone, buff, microcrystalline silty, massive, dense.
869-882	LIMESTONE	- Light brown, cryptocrystalline to microcrystalline, matrix, massive, dense, tight, scattered fossil fragments, argillaceous.
882-884	SHALE	- Light green, grey-green, fissile, calcareous, silty.
884-888	LIMESTONE	- Light brown, cryptocrystalline, massive, dense, silty, argillaceous, scattered fossil fragments.
888-890	SHALE	- Green, grey-green, fissile, silty, calcareous, pyritic
890-892	SILTSTONE	- Light green to light grey, sandy, calcareous, tight, very poor sample.
892-896	LIMESTONE	- Light brown, cryptocrystalline matrix, massive, dense, fossil fragments, slightly dolomitic, trace of pyrite, very poor samples.
896-900	SILTSTONE	- Light green, sandy, argillaceous, calcareous, tight, trace of pyrite.
900-906	LIMESTONE	- Cream to light grey, mottled, microcrystalline to cryptocrystalline, massive, dense, tight, argillaceous, silty, fossil fragments, very poor sample.
906-908	SILTSTONE	- Light green, sandy, argillaceous, calcareous, tight, trace of pyrite.
908-914	LIMESTONE	- Light brown, cryptocrystalline to microcrystalline, massive, silty, argillaceous, tight, dense, trace of fossil fragments.

JEAN MARIE 914 m (-301 m)

914-915	SHALE	- Light green, grey-green, fissile, sandy, silty, very calcareous, trace of pyrite.
---------	-------	---

SAMPLE DESCRIPTIONS

13

- 915-916 m SILTSTONE - Light green, sandy, argillaceous, calcareous, tight, trace of pyrite.
- 916-928 LIMESTONE - Cream to light brown mottled, microcrystalline to cryptocrystalline matrix, massive, dense, tight trace silty, scattered fossil fragments, minor brown bituminous shale laminations.

FORT SIMPSON 928 m (-315 m)

- 928-931 SHALE - Green, grey-green, fissile, micaceous, calcareous, pyritic.
- 931-936 SILTSTONE - Light green to light grey, sandy, argillaceous, calcareous, tight, with mica flakes; minor shale, light green fissile, silty.
- 936-938 SHALE - Green, grey-green, micaceous, fissile, silty, trace of pyrite.
- 938-941 LIMESTONE - Cream to buff, cryptocrystalline, sandy, silty, massive, dense, tight, trace of fossil fragments.
- 941-943 SILTSTONE - Light green, light grey to light green, sandy, argillaceous, micaceous, trace of pyrite, calcareous.
- 943-949 SHALE - Green, grey-green, fissile, micaceous, calcareous, with light green siltstone stringers.
- 949-952 SILTSTONE - Light green, sandy, argillaceous, micaceous, calcareous trace of pyrite.
- 952-955 SHALE - Green, micaceous fissile, calcareous, silty, trace of pyrite.
- 955-957 SILTSTONE - Light green, sandy, argillaceous, micaceous, calcareous, tight, trace of pyrite.
- 957-966 SHALE - Green, grey-green, fissile, micaceous, calcareous, trace of siltstone stringers; minor sandstone stringers, light green.
- 966-970 SILTSTONE - Light green, light grey to light green, sandy, argillaceous, calcareous with mica flakes, trace of pyrite.
- 970-975 SHALE - Green, grey-green, fissile, with light green siltstone stringers, calcareous.
- 975-977 SILTSTONE - Light green, sandy, argillaceous, calcareous, with mica flakes, trace of pyrite.
- 977-982 SHALE - Green, grey-green, fissile, calcareous, silty, trace of pyrite.
- 982-985 SILTSTONE - Light green, sandy, argillaceous, calcareous, with mica flakes, trace of green shale laminations.
- 985-991 SHALE - Green, grey-green, micaceous fissile, silty, calcareous; interbedded with shale, red-brown, fissile, micaceous, silty.

SAMPLE DESCRIPTIONS

14

991-994 m	SILTSTONE	- Brown, grey-brown, with red grains, mica flakes, sandy, calcareous, tight.
994-997	SHALE	- Brown, red-brown, micaceous, fissile, silty, calcareous.
997-1002	INTERBEDDED SILTSTONE	- Light green, grey-green, sandy, calcareous, with mica flakes; shale, green, fissile, slightly calcareous.
1002-1005	SHALE	- Brown, red-brown, fissile, micaceous, silty, splintery.
1005-1007	SILTSTONE	- Red-brown, sandy, argillaceous, calcareous, with mica flakes, trace of pyrite.
1007-1013	INTERBEDDED SHALE	- Brown, red-brown, fissile, micaceous, silty; siltstone, brown, sandy, with mica flakes, slightly calcareous.
1013-1023	SHALE	- Green, grey-green, fissile, with siltstone stringers; interbedded with shale, brown, red-brown, micaceous, silty, calcareous.
1023-1025	SILTSTONE	- Light brown, sandy, argillaceous, with red grains, mica flakes, slightly calcareous.
1025-1027	SHALE	- Brown, red-brown, micaceous, calcareous, fissile, silty.
1027-1031	SILTSTONE	- Buff to light brown, sandy, with pink grains, mica flakes, calcareous; grading to sandstone, clear to white, quartz, very fine grained, subangular, well sorted, tight, silty, calcareous, with mica flakes.
1031-1044	SHALE	- Green, grey-green, micaceous, fissile, calcareous; interbedded with siltstone, light green, grey-green, sandy, argillaceous, with mica flakes.
1044-1053	INTERBEDDED SHALE	- Brown, red-brown, sandy, argillaceous, calcareous, with siltstone stringers; siltstone, brown, red-brown, sandy, argillaceous, with mica flakes.
1053-1058	SHALE	- Green, grey-green, micaceous, fissile, with siltstone stringers, calcareous, trace of pyrite.
1058-1062	SILTSTONE	- Buff to light green, sandy, argillaceous, calcareous, tight, with mica flakes, trace of pyrite.
1062-1067	SHALE	- Green, micaceous, fissile, splintery, calcareous, trace of pyrite.
1067-1071	SILTSTONE	- Light green, buff to light green, with sandstone stringers, mica flakes, slightly calcareous, trace of pyrite, minor green shale laminations.
1071-1086	INTERBEDDED SHALE	- Green, grey-green, micaceous fissile, with siltstone stringers; shale, brown, red-brown, fissile, silty, micaceous, calcareous.

1086-1088 m	SILTSTONE	- Light brown to buff, sandy, argillaceous, calcareous, with mica flakes, trace of pyrite.
1088-1098	INTERBEDDED SHALE	- Brown, grey-brown, micaceous, fissile, silty, calcareous; shale, green, grey-green, micaceous fissile, with light green siltstone stringers.
1098-1100	SILTSTONE	- Brown, argillaceous, sandy, calcareous, with abundant mica flakes.
1100-1105	INTERBEDDED SHALE	- Brown, red-brown, micaceous fissile; interbedded shale, green; siltstone, light brown, red-brown, sandy, argillaceous, micaceous, calcareous.
1105-1122	INTERBEDDED SHALE	- Green, grey-green, micaceous, fissile, calcareous; siltstone, light green, sandy, argillaceous, with mica flakes, trace of pyrite.
1122-1129	SHALE	- Brown, grey-brown, micaceous, fissile, silty, calcareous, weak; minor siltstone, brown, sandy, argillaceous, with mica flakes.
1129-1136	SILTSTONE	- Buff to light brown, with sandstone stringers, red grains, mica flakes, trace calcareous, trace brown shale partings.
1136-1141	SHALE	- Brown, red-brown, fissile, with siltstone stringers, micaceous, calcareous.
1141-1146	SILTSTONE	- Buff to light brown, sandy, argillaceous, calcareous, with mica flakes, shale partings, brown.
1146-1152	SHALE	- Green, micaceous, fissile, with siltstone stringers, calcareous.
1152-1157	SILTSTONE	- Light green, light grey to light green, sandy, argillaceous, calcareous, tight, with green shale partings, trace mica flakes.
1157-1200	INTERBEDDED SHALE	- Green, micaceous, fissile, calcareous, with trace of pyrite; siltstone, light green, sandy, argillaceous, with mica flakes, tight, calcareous, trace of pyrite.
1200-1208	SHALE	- Brown, red-brown, micaceous, fissile, sandy, silty; interbedded with shale, green, micaceous, fissile, calcareous.
1208-1210	SHALE	- Green, grey-green, micaceous, fissile, with light green, micaceous, siltstone stringers, calcareous, grading to siltstone, light green, sandy, argillaceous, calcareous, with mica flakes.
1210-1230	SHALE	- Green, brown-green, fissile, micaceous, calcareous, with brown-green siltstone stringers, calcareous, with mica flakes.
1230-1300	SHALE	- Green, brown-grey, fissile, splintery, calcareous, with a trace of brown, siltstone stringers, calcareous, micaceous, tight.

1300-1325 m	SHALE	- Green, grey-green, fissile, calcareous, splintery, trace of siltstone stringers.
1325-1340	SHALE	- Brown, green-brown, fissile, calcareous, splintery, trace of siltstone stringers.
1340-1370	SHALE	- Green, fissile, calcareous, trace silty, splintery, minor shale brown.
1370-1376	SHALE	- Brown, green-brown, fissile, calcareous, trace silty, trace of pyrite.
1376-1386	SHALE	- Green, grey-green, fissile, calcareous, trace silty.
1386-1400	SHALE	- Brown, green-brown, micaceous, fissile, bulky, trace calcareous.
1400-1475	SHALE	- Green, bulky, fissile, calcareous, micaceous, trace silty, trace of pyrite.
1475-1504	SHALE	- Green, bulky, calcareous, fissile, splintery; shale, brown-black, bulky, bit, trace of pyrite.
1504-1518	SHALE	- Dark brown, bituminous, bulky, trace silty, trace of pyrite.

SLAVE POINT 1518 m (-905 m)

1518-1520	LIMESTONE	- Medium brown, cryptocrystalline matrix, massive, dense, scattered crinoid and brachiopod fragments, bituminous, pyritic; minor limestone, light green-grey, cryptocrystalline, massive, argillaceous.
1520-1530	LIMESTONE	- Brown, cryptocrystalline, massive, dense, scattered, stromatoporoid and amphipora fragments, trace bituminous, trace of stylolites, trace of pyrite; minor chert, grey-brown, cryptocrystalline, calcareous.
1530-1535	LIMESTONE	- Light brown, cryptocrystalline to coarse crystalline matrix, massive stromatoporoid fragments, amphipora, brachiopods, trace of pyrite, stylolites.
1535-1546	LIMESTONE	- Brown, calcilutite, cryptocrystalline matrix, lime mud with scattered stromatoporoid and bioclastic debris, trace of pyrite, trace bituminous, trace of stylolites.
1546-1548	LIMESTONE	- Light grey to light brown, calcarenite, pellets, stromatoporoid fragments, bioclastic debris, slightly bituminous, pyritic, trace of stylolites.
1548-1555	LIMESTONE	- Tan to buff, cryptocrystalline, massive, dense, tight, trace of fossil fragments, trace of pellets.
1555-1569	LIMESTONE	- Medium to light brown, calcarenite, 35% pellets, 20% stromatoporoids, 20% bioclastic debris, coarse grained, bituminous, trace of stylolites; interbedded with limestone, light to medium brown, cryptocrystalline, massive, tight, scattered pellets.

1569-1589 m LIMESTONE - Tan to buff, cryptocrystalline matrix, massive, dense, tight, with scattered pellets, non-descript algae material, trace of pyrite.

WATT MOUNTAIN 1589 m (-976 m)

1589-1591 SHALE - Apple green, waxy, splintery, soft, pyritic; minor limestone, tan to light grey, cryptocrystalline matrix, trace of pyrite, trace fractures.

SULPHUR POINT 1591 m (-978 m)

1591-1595 INTERBEDDED - Tan to buff, 80% pellets, matrix partly cemented
CALCARENITE with clear calcite, 5% interpelletoidal porosity; limestone, tan to buff, microcrystalline, massive, dense, tight, hard, scattered pellets.

1595-1602 LIMESTONE - Tan to buff, cryptocrystalline matrix, massive, dense, tight, scattered pellets; minor calcarenite buff, pellets, and rounded bioclastic debris, matrix partly cemented with calcite.

1602-1605 LIMESTONE - Pelletoidal calcarenite, buff to tan, fine to medium grained, pellets subrounded bioclastic debris, matrix partly cemented with clear calcite, 10% interpelletoidal porosity.

1605-1625 LIMESTONE - Cream to white, tan, matrix cryptocrystalline, massive, dense, tight, scattered pellets, ostracods, fossil debris, trace of pyrite.

1625-1670 LIMESTONE - White to cream, cryptocrystalline matrix, massive, dense, tight, trace fractures, scattered pellets, fossil debris, trace of pyrites.

KEG RIVER 1670 m (-1057 m)

1670-1690 DOLOMITE - Buff to light grey, very fine to fine grained, massive, partly leached, trace to 10% intercrystalline and vuggy porosity, trace of white drusy dolomite in vugs.

1690-1705 DOLOMITE - Buff to light brown, fine grained, dolarenite, massive, 10% intercrystalline and intervugular porosity, trace of pyrite.

1705-1723 DOLOMITE - Light to medium brown, very fine to fine grained dolarenite, with scattered intercrystalline and vugular porosity, trace to 6% porosity, trace of pyrite.

1723-1725 DOLOMITE - Light to dark brown, fine to medium grained, 15% intergranular and vugular porosity, indistinct stromtoporoid remains, trace of pyrituminous material in vugs.

1725-1736 DOLOMITE - Grey-brown dolosiltite, massive, dense, tight, with minor zones of intercrystalline porosity, trace to 5% intercrystalline porosity.

1736-1754 DOLOMITE - Light to medium brown dolarenite, fine to very fine grained, massive, scattered fossil remains, crinoids

- 1736-1754 m Continued.... stromatoporoids, 15-20% intercrystalline and inter-vugular porosity, trace of pyrobituminous material in vugs.
- 1754-1760 DOLOMITE - Brown, grey-brown, dolosiltite, massive, dense, bituminous, tight, scattered crinoids, trace of pyrite, trace bituminous.
- LOWER KEG RIVER 1760 m
- 1760-1765 LIMESTONE - Medium to dark brown, microcrystalline matrix, massive, dense, tight, argillaceous, 4% dolomite, scattered brachiopod fragments, trace of pyrite.
- 1765-1785 LIMESTONE - Dark brown, cryptocrystalline, massive, tight, argillaceous, scattered fossil fragments, trace of pyrite, trace bituminous shale laminations.
- 1785-1793 LIMESTONE - Brown, grey-brown, microcrystalline to cryptocrystalline matrix, massive, dense, tight, argillaceous, scattered brachiopods, crinoids, trace of pyrite.
- CHINCHAGA 1793 m (-1180 m)
- 1793-1801 DOLOMITE - Light brown microcrystalline to cryptocrystalline matrix, massive, dense, tight, with anhydrite inclusions brown crystalline, minor anhydrite buff cryptocrystalline
- 1801-1804 ANHYDRITE - Buff to light brown, cryptocrystalline, massive, dense, dolomitic, tight.
- 1804-1806 DOLOMITE - Light brown to buff, microcrystalline, matrix, tight, dense, with light brown anhydrite stringers.
- 1806-1817 ANHYDRITE - Buff to light brown, cryptocrystalline, massive, dense, tight, with light brown dolomite stringers.
- 1817-1835 INTERBEDDED DOLOMITE - Light brown to light grey, cryptocrystalline to microcrystalline, massive, dense, trace of anhydrite stringers and inclusions; anhydrite, buff to light grey, cryptocrystalline matrix, massive, dense, dolomitic.
- 1835-1837 SHALE - Green, grey-green, splintery, dolomitic, trace sandy.
- 1837-1839 ANHYDRITE - Light grey, light green to light grey, cryptocrystalline, argillaceous, dolomitic, trace of green shale laminations.
- GRANITE WASH 1839 m
- 1839-1848 INTERBEDDED SHALE - Green, splintery, sandy, silty; sandstone, white, arkosic, fine to medium grained, subangular to subrounded, medium sorted, partly friable, matrix cemented with kaolin, trace of feldspar, clear quartz granules.
- 1848-1853 SANDSTONE - White to pink arkosic, fine to coarse grained, subangular to subrounded, well sorted, partly friable, matrix cemented with kaolin and silica, trace of red shale stringers.

1853-1856 m

- Interbedded red and green waxy shale, with sand grains.

1856-1863

- SANDSTONE

- Buff to pink arkosic, very fine to coarse grained, subangular to subrounded, medium to poorly sorted, matrix partly cemented with kaolin, silica, scattered clear quartz granules, mica flakes, weathered feldspar.

PRECAMBRIAN 1863 m (-1850 m)

1863-1885

GRANITE

- Pink to green, mottled, hard, dense, massive, quartz, biotite, feldspar, partly weathered, trace of shale, green-red, waxy, sandy.

NOYES SUPERVISION (1978) LTD.

GEOLOGICAL RECORD

WELL WESTCOAST ET AL SILT LAKE G-62

LOCATION 60° 01' 29.21" N, 119° 12' 9 1.75" W

FIELD _____

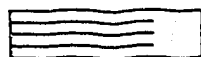
GD. ELEVATION 608.4 m

KB. ELEVATION 613.0 m

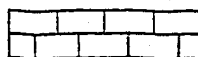
DATE 80 02 24

PREPARED BY J.W. FULTON

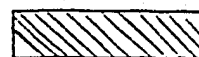
LEGEND



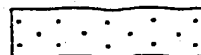
SHALE



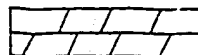
LIMESTONE



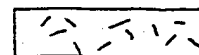
ANHYDRITE



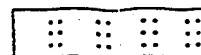
SANDSTONE



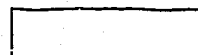
DOLOMITE



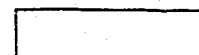
GRANITE



SILTSTONE



CLAY



DEPTH	DRILLING TIME min./m.	OIL SHOW	POROSITY TYPE	LITHOLOGY	CRYSTAL OR GRAIN SIZE	ROUNDING	SORTING	DESCRIPTION	ENG. DATA
	2 6 10 14 24 30		GOOD FAIR POOR						

	2	6	10	14	20	24	
500m							sh m-ltgy, mica fis, sply, wk, sl calc.
MBF							sh lt-mgy, mica fis, wk, sl calc, tr slty
							tr sh gy, qn-gy, mica fis, sl calc, wk.
							sh lt-mgy, mica, fis, wk, sply, tr calc.
525m							sh ltgy-mgy, mica fis, wk, sply, tr calc.
537							sh m-ltgy, mica, fis, wk, sl calc.
DNA.							ls cem-bf, micxl, mass, dns, tr Ost, Crin, sl dol.
							ls cem, micxl, mass, sl dol, tr fos deb.
550m							ls cem-buff, micxl, chky, Ost, Crin, fos deb, sl dol, sl arg.
							ls cem, crpxl, mass, dns, scat fos frag.
							ls cem, crpxl, mass, dns, scat fos deb, sl dol, tr arg.
							ls cem-tan, micxl, crpxl, mass, dns in pt, scat, Ost, fos deb, tr bit.
575m							ls cem-bf, micxl, sft, tr rexl, Ost, Pel, Brac, deb, sl dol, sl bit.
							ls cem, micxl, crpxl, mass, scat fos frag, mtr pt, chky, sl dol.
600m							ls cem-tan, micxl, crpxl, mass, scat Ost, Brac, tr Pel, sl dol, tr bit.
							ls cem, micxl, crpxl, mass, pt rexl, scat Pel, Ost, mtr pt, chky, sl dol, sl bit, sl arg.
625m							ls cem-tan, crpxl, mass, dns, sl dol, tr fos deb.

800 m	2 6 10 14 20 24	CX F	Ls cem-tan, crpxl, dns, sl bit, sl dol, v. poor spls, tr fos frag
		CX F	Ls tan, crpxl-micxl, mtx, scat fos frag
		C L	tr slty, v. poor spls, sl bit, sl dol
		CX F	
		CX	Ls cem-bf, micxl-crpxl mtx, mass, dns, v. poor spls, scat Crin, Brac frag, sl dol
825		CX F	
		CX	
		CX F	Ls cem-tan, crpxl mtx, mass dns, lt, scat Ost, Crin frag, v. poor spls, sl bit, slty, sl dol
		CX F	
		CX	Ls lf-cem, crpxl mtx, sl bit, slty, tr F. dothyra, sl dol, tr pyr, v. poor spls
850 m		CX	
		CX	Ls bf-lt brn, micxl-crpxl, mass dns, slty, sl bit, scat fos frag, tr sdy, v. poor spls
		CX	
		CX	
		C	Slst cl-wt, sdy, calc, tr mica flks
875 m		CX F	Ls bf-lt brn, crpxl-micxl, mass, dns, slty arg, scat Brac frag, sl dol
		CX	
		CX F	Sh qn, fis, slty, r. calc
		C	Ls lt qn-lt brn, crpxl, mass, dns, slty arg, tr sdy, Sh lt qn, slty, fis, calc
		C	Slst lt qn-wt, sdy, calc, arg, v. poor spls
900 m		CX	
		C F	Ls cem-lt qn, mol, slty, crpxl-micxl mtx, tr pyr, scat fos frag, v. poor spls
		CX F	
		CX	Slst lt qn, sdy, arg, calc, tr mica
		CX	
925 m	914	CX	Ls tan, crpxl, mass, dns, tr slty, fos frag, Sh lt qn, sdy, slty, r. calc
	D 5H	C	Slst lt qn, sdy, arg, calc
		CX	
		C	
		C	

930 m 25 6 10 14 20 24

Di

Sh qn, qy, qn fis, slty, calc.
Siltst ltqn - ltqy, sdy, arg, calc, mica flks.
Sh qn, fis, calc, slty.

Sh qn, qy, qn fis, calc, slty.
Ls crm - bl, erpxt, sdy, slty, te fos frag,
Sh qn, qy, qn, fis, calc, slty

950 m

Siltst ltqn, clt-ltqn, sdy, arg, calc / mica flks.
Sh qn, qy, qn, fis, calc, slty.
Siltst ltqn, sdy, arg / mica flks, sl calc
Sh qn, qy, qn, mica, fis, te ltqn siltst strg.

975 m

Siltst ltqn, ltqy, ltqn, sdy, arg, calc / mica flks.
Sh qn, qy, qn, fis, slty.

Siltst ltqn, sdy, arg, calc / mica flks.
Sh qn, qy, qn, fis, slty.
Siltst ltqn, sdy, arg, calc / abnt mica flks, dism.
pyr.
Sh qn, mica fis, Sh brn, red-brn, fis, slty.
Siltst brn, qy-brn, red qy, arg, calc / mica flks.

1000 m

Siltst ltqn, sdy, arg / mica flks.
Sh ltqn, mica fis, slty.
Sh brn, red-brn, fis, mica, slty, calc.
Siltst brn, red-brn, sdy, mica, calc, qndg to sh
brn, red-brn, fis, slty.
Sh brn, red-brn, mica fis, slty, calc. - int bd / sh
qn, qy, qn, fis, slty, mnt siltst brn, red-brn.
Sh qn, qy, qn, fis, mica, slty.

1025 m

Sh brn, red, mica, fis, slty.
Siltst of - lt brn, sdy, mica, qndg to ss, clt, sh
red qy, slty, mica flks.
Siltst ltqn, ltqy, ltqn, sdy, mica, calc.
Sh qn, qy, qn, mica, fis, slty.
Siltst ltqn, sdy, arg, calc, te dism pyr.
Sh brn, red-brn, mica fis, v. slty, tr brn siltst strg.

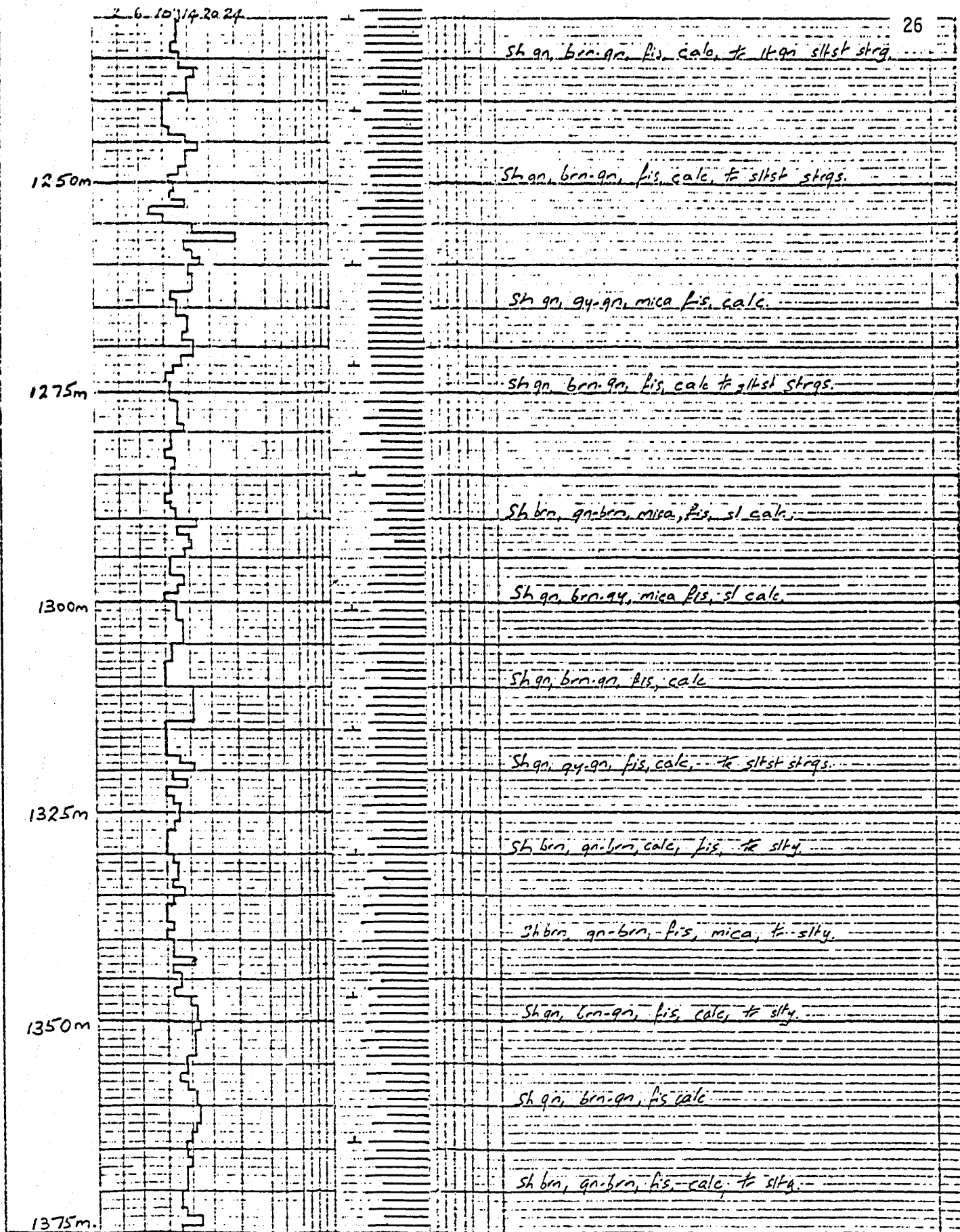
1050 m

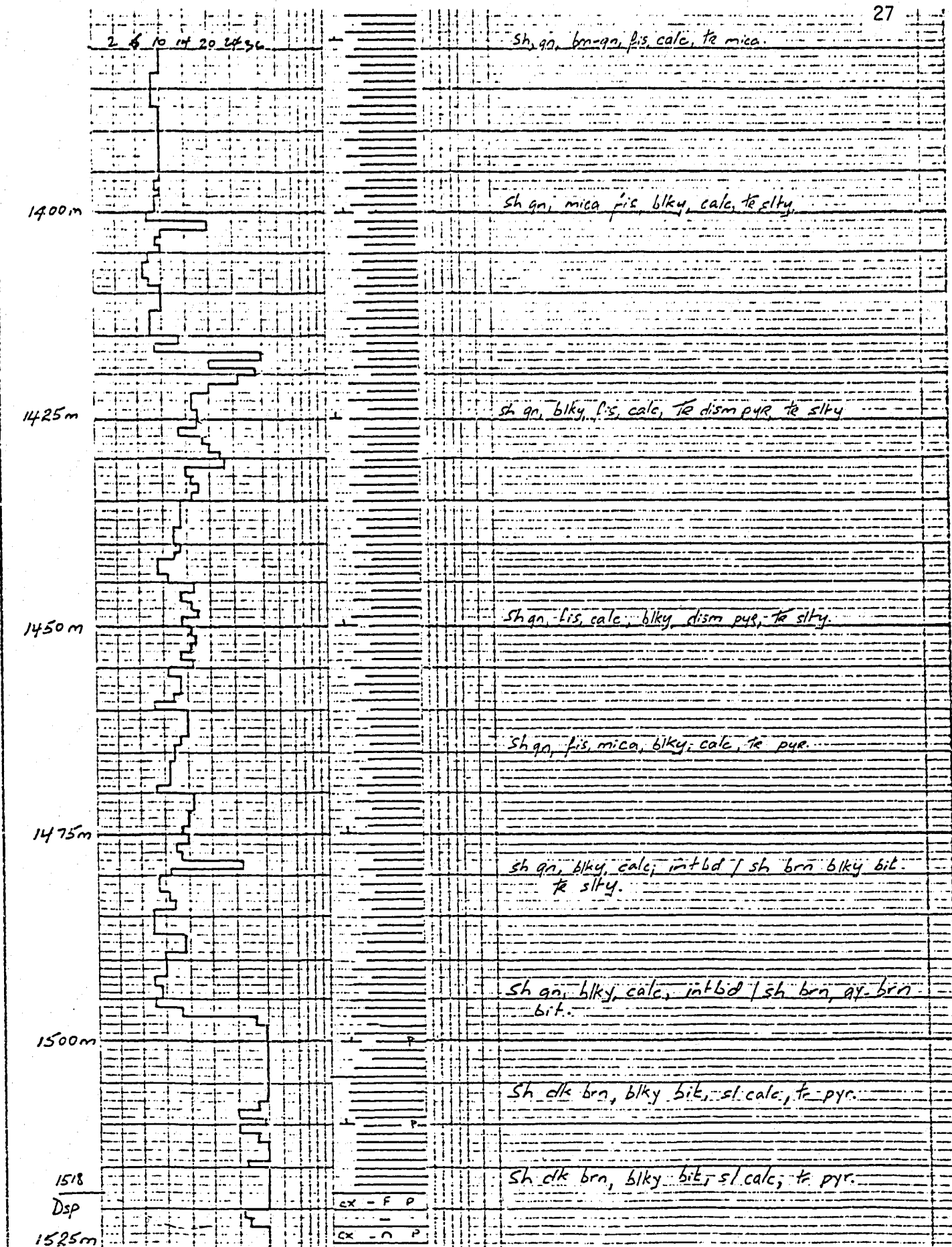
Siltst brn, red-brn, sdy, arg / mica flks, sl calc, tr
pyr.
Sh qn, qy, qn, mica fis, slty.
Siltst qn, bl, ltqn, sdy, arg, calc / mica flks.
Sh qn, qy, qn, mica fis, slty, calc.
Siltst ltqn, clt-ltqn, sdy, arg, calc / mica flks, te
dism pyr.

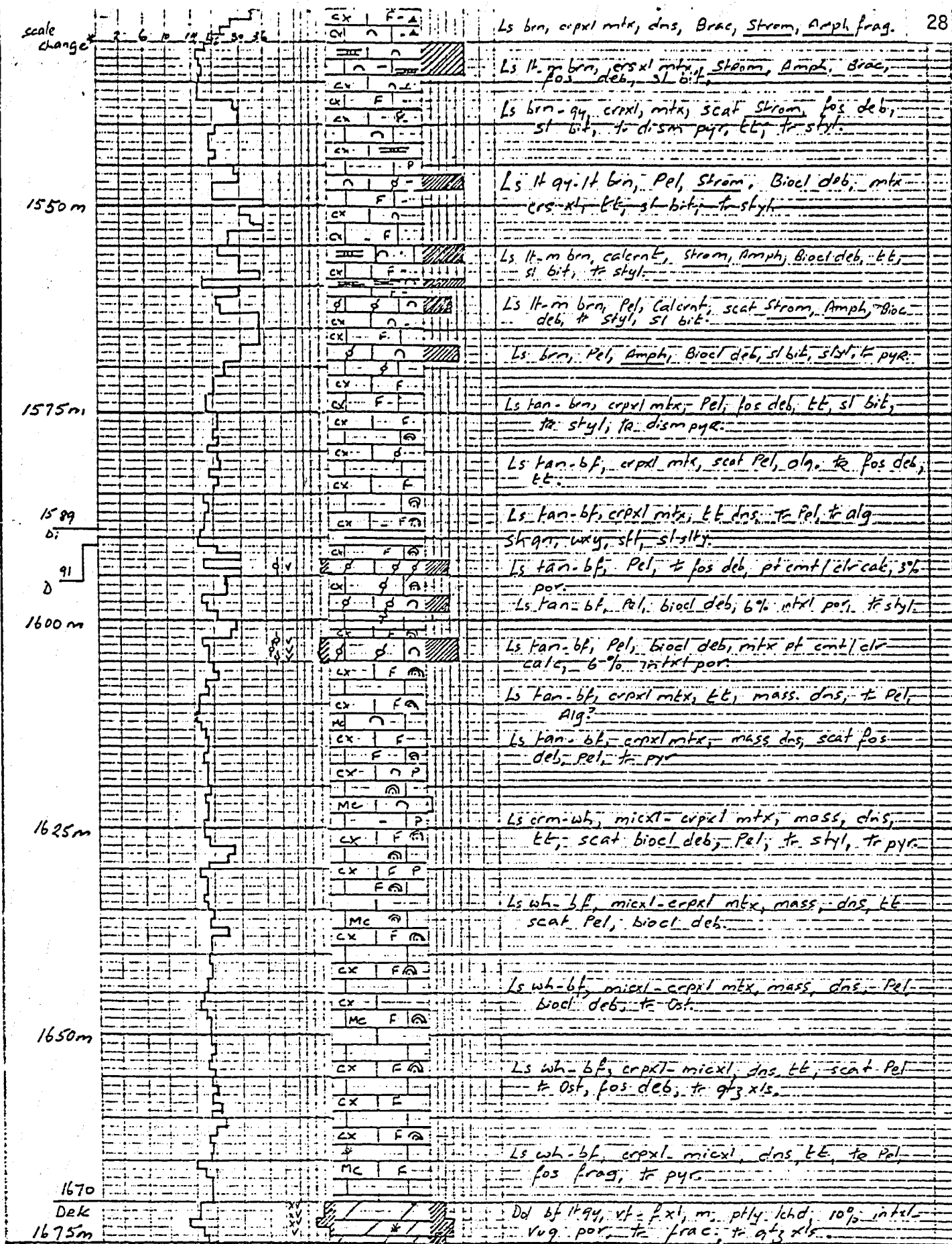
1075 m

Sh qn, qy, qn, mica fis, slty.

	2.6.14.20.24		siltst-lt qn, sdy, arg, mica flks, st calc sh brn, red-brn, mica fis, slty, int bed / sh qn, fis sh qn, brn-qn, mica fis, slty sh qn, brn-qn, fis, calc, tr siltst strgs.
1100 m			Siltst brn, qn-lrn, sdy, arg, calc / dbnt mica flks. Siltst lt brn, sdy, arg, calc / mica flks, tr pyr. sh qn, mica fis, slty, calc Siltst lt qn, sdy, arg, calc / mica flks. sh qn, qn-qy, mica fis, slty, calc, tr pyr. Siltst bf-lt qn, sdy, arg / mica flks, calc, tr sh qn, qy-qn, mica fis, slty, tr pyr. Siltst brn, red-brn, sdy, arg, calc, mica flks
1125 m			sh brn, qy-brn, mica fis, slty, wk, splty, tr siltst strgs. Siltst lt-lt brn, sdy, arg, calc, seat red qn, brn-red sh lam, mica flks. sh brn, red-brn, fis, splty, mica / siltst strgs, mnr sh brn-qn, mica fis, slty. Siltst bf-lt brn, arg / ss strgs; brn sh lam st calc, mica flks. sh qn, mica fis.
1150 m			Siltst lt qn, lt qy-lt qn / mica flks, ss strgs, calc, mnr qn mica sh phgs, tr dism pyr. Siltst lt qn, bf-lt qn, sdy, arg, calc / mica flks tr pyr. sh qn, qy-qn mica fis, calc.
1175 m			Siltst bf-lt qn, sdy, arg / mica flks; Siltst-lt qn, lt qy-lt qn, sdy, arg, calc / mica flks. sh qn, brn-qn, mica fis, slty, tr pyr.
1200 m			sh qn, mica fis, mnr siltst bf-lt qn, sdy arg, calc / mica flks. Siltst lt qn, bf-lt qn, sdy / mica flks. sh brn, red-brn, mica fis, slty. sh qn, mica fis, calc. Siltst lt qn, bf-lt qn, sdy / mica flks.
1225 m			sh qn, mica fis, calc tr siltst strgs.







1700

1725m

1750m

1775m

43

Dec

1800

1825

Dol. bt-It qy, vt-fxl, 10% intxl & vug por.

Dol. bt-It qy, mol, fxl, 15% intxl por.

Dol. It-m brn, fxl, por, 15% intxl por, to indst fos rmas.

Dol. m-It brn, f xl, pt lchd, 15% intxl & vug por.

Dol. brn, vt-fxl, mass pt lchd, indst fos rmas, 10% intxl vug por.

Dol. It-m brn, f m xl, sl lchd, 15% intxl & vug por, to indst fos rmas.

Dol. brn, vt xl, mass dns, lt, to pyr bit.

Dol. It-m brn, xl, mass, to indst fos rmas.

Dol. brn, It-m brn, f-m xl, dns, lchd, fos, to Strom, 20% intxl vug por.

Dol. brn, f-m xl, Crin, pmsh, Strom, lchd, 20% 10% intxl vug por.

Dol. brn, qy-brn, vt xl, mass dns lt, to fos deb, sl arg.

Ls. m-dk brn, crpxl-micxl mtr, dns, r dol, bit, arg, to Brac, Crin.

Ls. brn crpxl, dns lt, sl arg, sl dol, to Crin, fos frag, to Brac.

Ls. brn, crpxl lt, dns, arg, scat Crin, Brac fos frag, to dism pyr.

Ls. m-dk brn, lt crpxl-micxl, arg, scat fos deb.

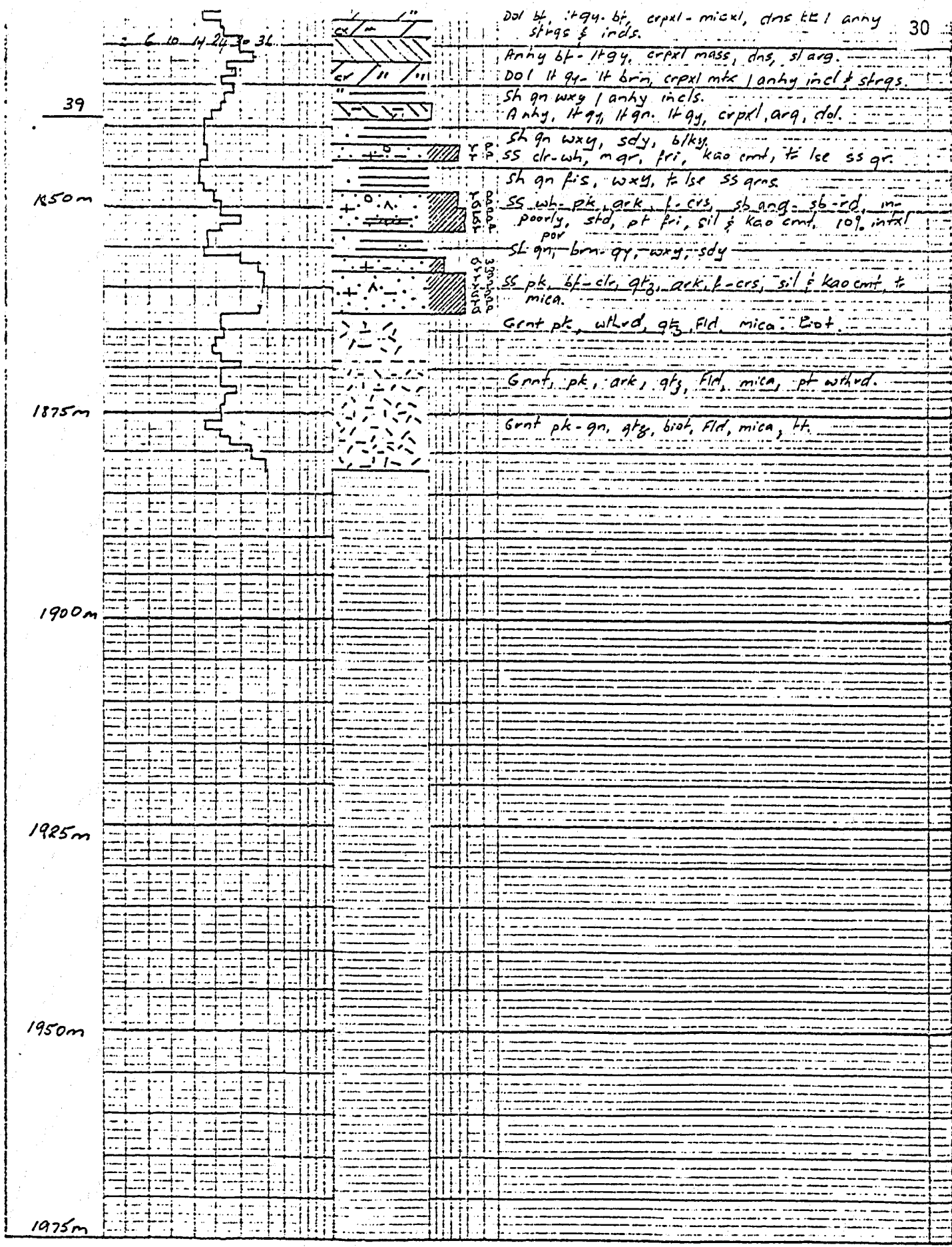
Dol. brn, It-m brn, micxl mtr, mass dns, lt, brn xl anhy incl.

Anhy, bf-It brn, mol, crpxl mass, dns dol strgs.

Dol. It brn, bf-It brn, anhy, incl & strgs.

Anhy, bf-It brn, crpxl, mass, dns, lt brn micxl dol strgs.

Dol. It brn-bf, micxl mtr, mass dns, lt, bf-brn, anhy, incl, to anhy strgs.



Dol. bt. itgy. bt. crpxl - micxl, dms EE 1 anhy 30
strgs & inds.

Anhy bt - itgy. crpxl mass, dms, sl arg.

Dol it gy - it brn, crpxl mte 1 anhy incl & strgs.

Sh gn wxy 1 anhy incl.

Anhy, itgy, itqn. itgy, crpxl, arg, dol.

Sh gn wxy, sdy, bky.

SS clr-wh, mgr, fri, kao cmt, to lse ss gr.

Sh gn fis, wxy, to lse ss qns.

SS wh-pk, ark, f-crs, sh ang, sb-rd, m

poorly, std, pt fri, sil & kao cmt, 10% intal

SL gn, brn, gy, wxy, sdy

SS pk, bt-clr, qtz, ark, f-crs, sil & kao cmt, to mica.

Gent pk, wlvrd, qtz, fld, mica. Prot.

Gent, pk, ark, qtz, fld, mica, pt wlvrd.

Gent pk-gn, qtz, biot, fld, mica, lt.



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON FORT ST. JOHN CANADA



31

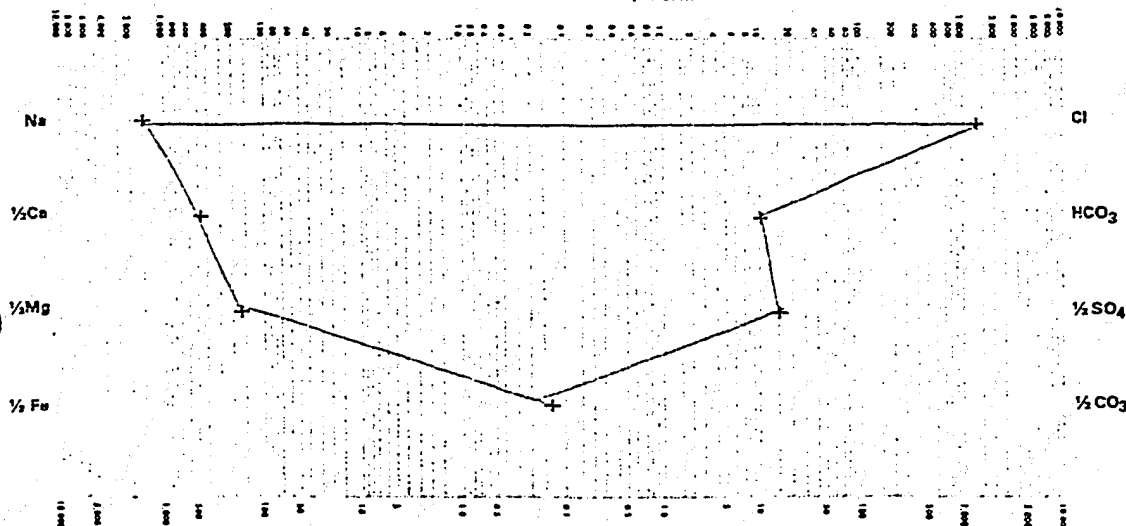
CONTAINER IDENTITY		WATER ANALYSIS		LABORATORY NUMBER	
				F80-1397-4	
LICENCE NUMBER		OPERATOR NAME			
		WESTCOAST PETROLEUM LTD.			
C/P NUMBER		WELL NAME		ELEVATIONS	
		WESTCOAST ET AL SILTLAKE #G-62		K.B. (metres) GRD.	
				613 608.4	
FIELD OR AREA		POOL OR ZONE		NAME OF SAMPLER	
SITLAK		KEG RIVER			
TEST TYPE		TEST RECOVERY		COMPANY	
DST		732 M		LYNES UNITED SERVICES LTD.	
NO.					
1					
Y/N					
X					

SAMPLING POINT		AMT. & TYPE OF CUSHION		MUD RESISTIVITY	
BOTTOM				@ 27°C	
TYPE OF PRODUCTION					
PUMPING		FLOWING		GAS LIFT	
				SWAB	
PRODUCTION RATES					
WATER		OIL		GAS	
m ³ /d		m ³ /d		10 ³ m ³ /d	
SEPARATOR		TREATER		RESERVOIR	
GAUGE PRESSURE		SEPARATOR		TREATER	
kPa		kPa		kPa	
TEMPERATURE		TEMPERATURE		TEMPERATURE	
°C		°C		°C	

DATE SAMPLED (Y-M-D)	DATE RECEIVED (Y-M-D)	DATE REPORTED (Y-M-D)	ANALYST	OTHER INFORMATION
80/02/24	80/02/26	80/03/12	C.J./L.S./J.A.	

ION	$\frac{m \cdot V^2}{g \cdot m^3}$	Mass Fraction	$\frac{c}{mol \cdot m^3}$	ION	$\frac{m \cdot V^2}{g \cdot m^3}$	Mass Fraction	$\frac{c}{mol \cdot m^3}$
Na	28 740	0.2999	1250.19	Cl	55 700	0.5813	1570.74
K	1 221	0.0127	31.26	Br			
Ca	6 302	0.0658	157.24	I			
Mg	1 609	0.0168	66.13	HCO ₃	854	0.0089	14.01
Ba				SO ₄	1 391	0.0146	14.47
Sr				CO ₃	0	0.0000	0.00
Fe	NIL			OH	0	0.0000	0.00
				H ₂ S	NIL		

TOTAL SOLIDS $\frac{m \cdot V^2}{g \cdot m^3}$	
EVAPORATED @ 110°C	EVAPORATED @ 180°C
104 900	
AT IGNITION	CALCULATED
88 020	95 817
ORGANICS: MUCH	
RELATIVE DENSITY	REFRACTIVE INDEX
1.067 @ 27°C	1.3494 @ 27°C
OBSERVED pH	RESISTIVITY (Ohm m)
7.1 @ 20 °C	0.085 @ 27°C

LOGARITHMIC PATTERN $c/mol \cdot m^3$ 

REMARKS

Sample consisted of muddy water with a cloudy filtrate.

continued.....

WESTCOAST PETROLEUM LTD

LABORATORY REPORT NUMBER: E80-1397

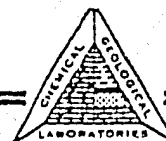
E80-1397-1: Sample taken from Top
RESISTIVITY: 1.318 OHM/Meters @ 25°C
Sample consisted of muddy water with an orange filtrate.

E80-1397-2: Sample taken from Middle #1
RESISTIVITY: 0.158 OHM/Meters @ 25°C
Sample consisted of muddy water with a yellow filtrate.

E80-1397-3: Sample taken from Middle #2
RESISTIVITY: 0.109 OHM/Meters @ 25°C
Sample consisted of muddy water with a yellow filtrate.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

14203.129 AVENUE EDMONTON ALBERTA T5L 4N9

TELEPHONE
(403) 454.150496 HOUR MULTIPLE CONCENTRATION STATIC BIOASSAY

DATE REPORTED: APRIL 21, 1980

LABORATORY REPORT NUMBER: EB-80-322

1. GENERAL INFORMATION

Organization or Company: WESTCOAST PETROLEUM LTD.
 Land location of sample: WESTCOAST ET AL SILT LAKE G-62
 Source of test water: DRILLING MUD
 Sample point: _____
 Name and qualification of supervising biologist: MR. P. NIX, M.Sc. (MICROBIOLOGY)
 Name and qualification of individual conducting the test: MR. B. SALAHUB, B.Sc. (ZOOLOGY)
 Test species: Salmo gairdneri Richardson (Rainbow Trout)
 Source of test species: SPRING CREEK HATCHERY
 Mean length and weight of fish $\pm$ 1 S.D.: 3 cm x 1 g.
 Mortality rate of test species in the 4 days prior to test: LESS THAN 1%
 Source of holding water: Dechlorinated City of Edmonton tap water @ 15°C

2. SAMPLING INFORMATION

Date sampled: _____ Time sampled: _____
 Date received in lab.: MARCH 25, 1980 Time received in lab.: _____
 Method of sampling: (a) grab _____ (b) Composite (24 hrs.?) AMBIENT
 Handling method: (a) Temperature maintained during transport: _____
 (b) Temperature maintained during storage: _____
 (c) Length of storage @ 4°C: _____
 (d) Pretreatment of sample: NONE

3. TEST INFORMATION

Date test started: MARCH 26, 1980
 Size of test container: 2 litre
 Material of test container: Glass
 Volume of test solution per container: 1 litre
 Number of fish per container: 2
 Test temperature $\pm$ variance: 15 $\pm$ 1°C
 Method of aeration: bubbler
 Concentrations of test material: 10, 20, 40, 60, 80, & 100% by volume
 Source of dilution water: holding water

LABORATORY REPORT NUMBER: EB-80-322

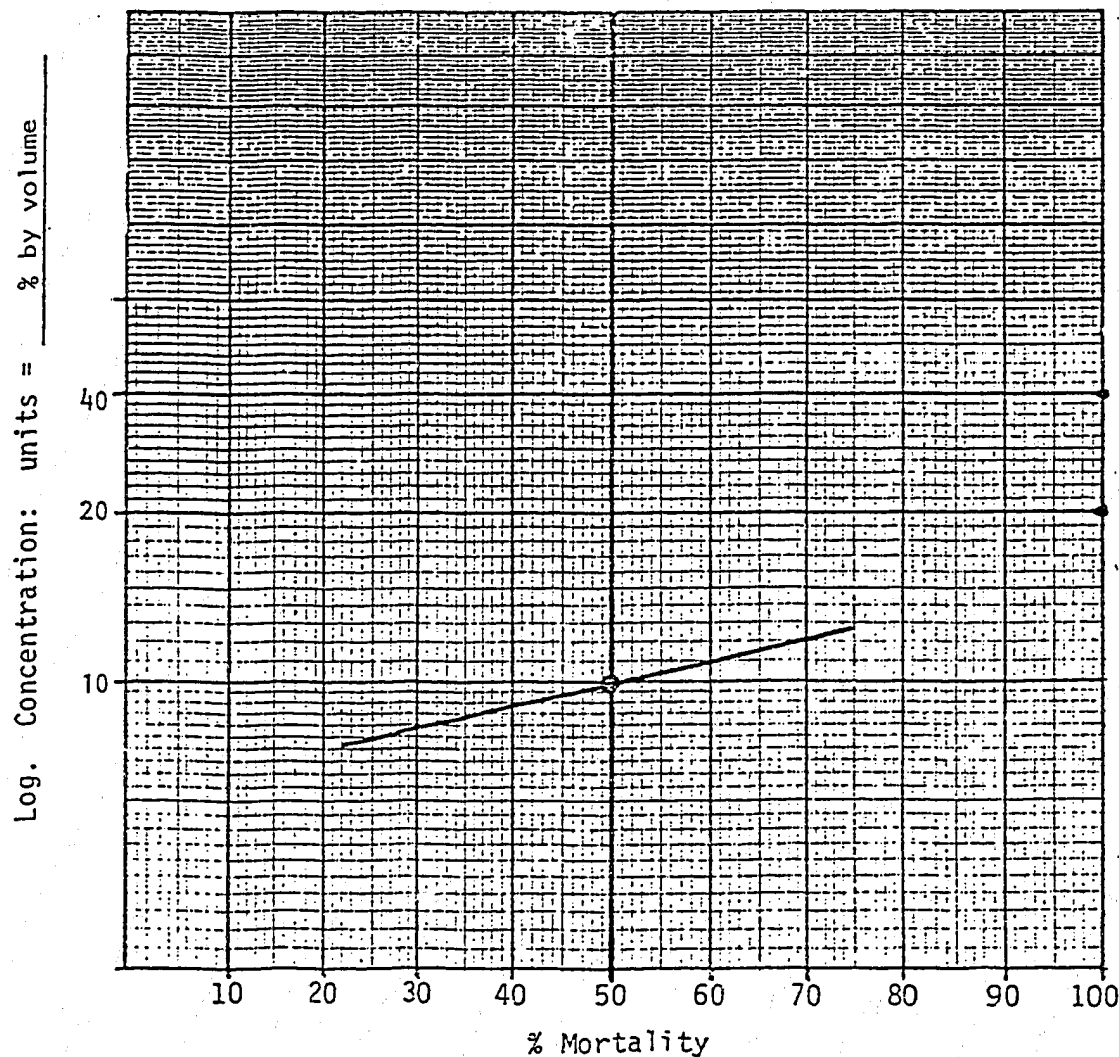
Concentrations % BY VOLUME : 10 : 20 : 40 : 60 : 80 : 100: : : Control

[illegible]

WESTCOAST PETROLEUMS LTD.

LABORATORY REPORT NUMBER: EB-80-322

Concentrations % BY VOLUME	: 10	: 20	: 40	: 60	: 80	: 100	:	:	Control
72 HRS. Number Surviving	: 2	: 0	: 0	: 0	: 0	: 0	:	:	: 2
Dissolved Oxygen (mg/l)	: >8	: >8	:	:	:	:	:	:	: >8
pH	: 8.2	: 8.5	:	:	:	:	:	:	: 8.1
Temperature (°C)	: 15	: 15	:	:	:	:	:	:	: 15
Stress (#)	:	:	:	:	:	:	:	:	:
96 HRS. Number Surviving	: 1	: 0	: 0	: 0	: 0	: 0	:	:	: 2
% Survival	: 50	:	:	:	:	:	:	:	: 100
Dissolved Oxygen (mg/l)	: >8	:	:	:	:	:	:	:	: >8
pH	: 8.1	:	:	:	:	:	:	:	: 8.1
Temperature (°C)	: 15	:	:	:	:	:	:	:	: 15
Stress (#)	:	:	:	:	:	:	:	:	:



LC50: 10% by volume

WESTCOAST PETROLEUM LTD.

LABORATORY REPORT NUMBER: EB-80-322

Oil & grease	23	g.m ⁻³
Chloride	260	g.m ⁻³
Suspended solids	20,000	g.m ⁻³
Total solids - dried	37,800	g.m ⁻³
- fixed	33,900	g.m ⁻³
- volatile	3,900	g.m ⁻³
pH	9.1	

<u>METALS</u>	<u>SOLUBLE (mg/L)</u>	<u>TOTAL (mg/L)</u>
Cadmium	< 0.01	0.23
Chromium	1.44	2.45
Copper	0.133	0.694
Iron	52.	104.
Nickel	< 0.02	1.16
Lead	0.45	1.03
Zinc	< 0.02	2.62
Mercury	0.0004	0.0004

LYNES UNITED SERVICES LTD.

DRILLSTEM TEST SUMMARY REPORT

Date: 80 02 23

Well name: WESTCOAST ET AL SILT LAKE G-62
Location: 400/ 50.300 / 119.120 / 00

Licence no. 01760
Ticket no. 40175

DST number 001 LYNES test #1 Test number 1 of 1 (on same trip)
Test type: INFLATE STRADOLE

Kelly bushing (M): 613.00 Ground elevation (M): 508.40
Interval from (M): 1670.00
to (M): 1687.00 Total depth (M): 1877.00

Formation: KEG RIVER

TIME AND PRESSURE DATA

Recorder #009487

	TIMES (min)	PRESSURES (kPa)		TIMES (min)	PRESSURES (kPa)
1st flow	20.	3242.0			
		3550.0	2nd flow	60.	3558.0
1st shutin	60.	13095.0	2nd shutin	120.	13163.0
3rd flow			4th flow		
3rd shutin			4th shutin		
Initial hydrostatic		17606.0	Final hydrostatic		17606.0

GENERAL REMARKS

The test results indicate a mechanically successful test; bottom hole pressures and the shape of the shut-in curves suggest AVERAGE PERMEABILITY within the interval tested.
Tool opened momentarily when trying to deflate packers at end of test; this did not affect the test results.
Charts indicate slight plugging on preflow.
Recorder #9495 - doesnot return to baseline; pressures invalid.

LYNES UNITED SERVICES LTD.

TEST RECOVERY DATA

Blow description:

Weak air blow on preflow, steadily increasing to fair to bottom of pail in 5 minutes, no gas to surface.

Weak air blow on valve opening, steadily increasing to fair to bottom of pail in 4 minutes, no gas to surface.

GAS MEASUREMENTS:

Measured with: NO GAS-INSTR AVAILABLE

Riser (mm):

TIME (min)	SURF. CHOKE (mm)	READING (kPa)	CUBIC METRES/D
------------	------------------	---------------	----------------

NO GAS
MEASUREMENTS

Liquid recovery:

For OST# 1 through OST# 1

Amount (M) Of

50.00 INHIBITOR WATER.

85.00 OIL FLECKED SALT WATER CUT MUD.

502.00 SULPHUROUS SALT WATER.

85.00 GAS CUT MUD.

Total recovery (M): 732.00

Reversed out: NO

Salinity (g/M3):

37500.

Bottom hole sampler#

Sent to:

Gas bomb#

Sent to:

No. of fluid samples: 4

Sent to: C & G

GENERAL DATA

Inhibitor : Inhibitor amount (M):

Cushion type: Liquid amount (M):
Gas pressure (kPa):

Started in hole: 1730.00 Hrs.

Opened tool at: 2250.00 Hrs.

MUD AND HOLE DATA

Hole condition at test time: FAIR
Conditioned prior to test: YES

Calipered hole size @ test depth (mm) 247.0

Mud type: GEL CHEMICAL

Viscosity (sec/l): 30.0

Filter cake (mm): 1.5

Mud weight (kg/M3): 1080.00

Water loss (cm3): 9.5

Log temperature (C): 56.0

Recorder temperature (C):

Pipe size (mm) Type Weight (kg/M)

114.3 NO DP-TYPE AVAILABLE 24.70

Collar size (mm) Type Int. diameter (mm) Length (M)

171.0 NO DP-TYPE AVAILABLE 77.0 107.35

BTM choke size (mm): 25.4

Rat hole size (mm):

Main hole size (mm): 222.2

Rat hole length (M):

Total number of packers run: 2

Mailing Data

Company: WESTCOAST PETROLEUM LTD.

Address: 11TH FLOOR
540 - 5TH AVE. S.W.
CALGARY, ALBERTA

Reports sent to: AL KOSTYNIUK

Number of Reports: 5

WELL NAME: WESTCOAST ET AL SILT LAKE G-62
WELL LOCATION: 60.300 / 119.120
DST NUMBER: 001
RECORDER NUMBER: 009487
INTERVAL TESTED: 1670.00M TO 1687.00M
RECORDER DEPTH: 1672.00M
TOTAL FLOW TIME: 20.MIN

FIRST SHUT IN PRESSURE (LIQUID)

TIME (MIN) PHI	(T+PHI) /PHI	PRESSURE (KPa)
.0	.0000	3550.0
5.0	5.0000	9609.0
10.0	3.0000	11867.0
15.0	2.3333	12299.0
20.0	2.0000	12434.0
25.0	1.8000	12595.0
30.0	1.6667	12697.0
35.0	1.5714	12798.0
40.0	1.5000	12875.0
45.0	1.4444	12942.0 *
50.0	1.4000	13002.0 *
55.0	1.3636	13052.0 *
60.0	1.3333	13095.0 *

* VALUES USED IN HORNER ANALYSIS

SLOPE: 4401.52449 KPa/CYCLE

EXTRAPOLATED PRESSURE: 13645.0 KPa

HORNER PLOT

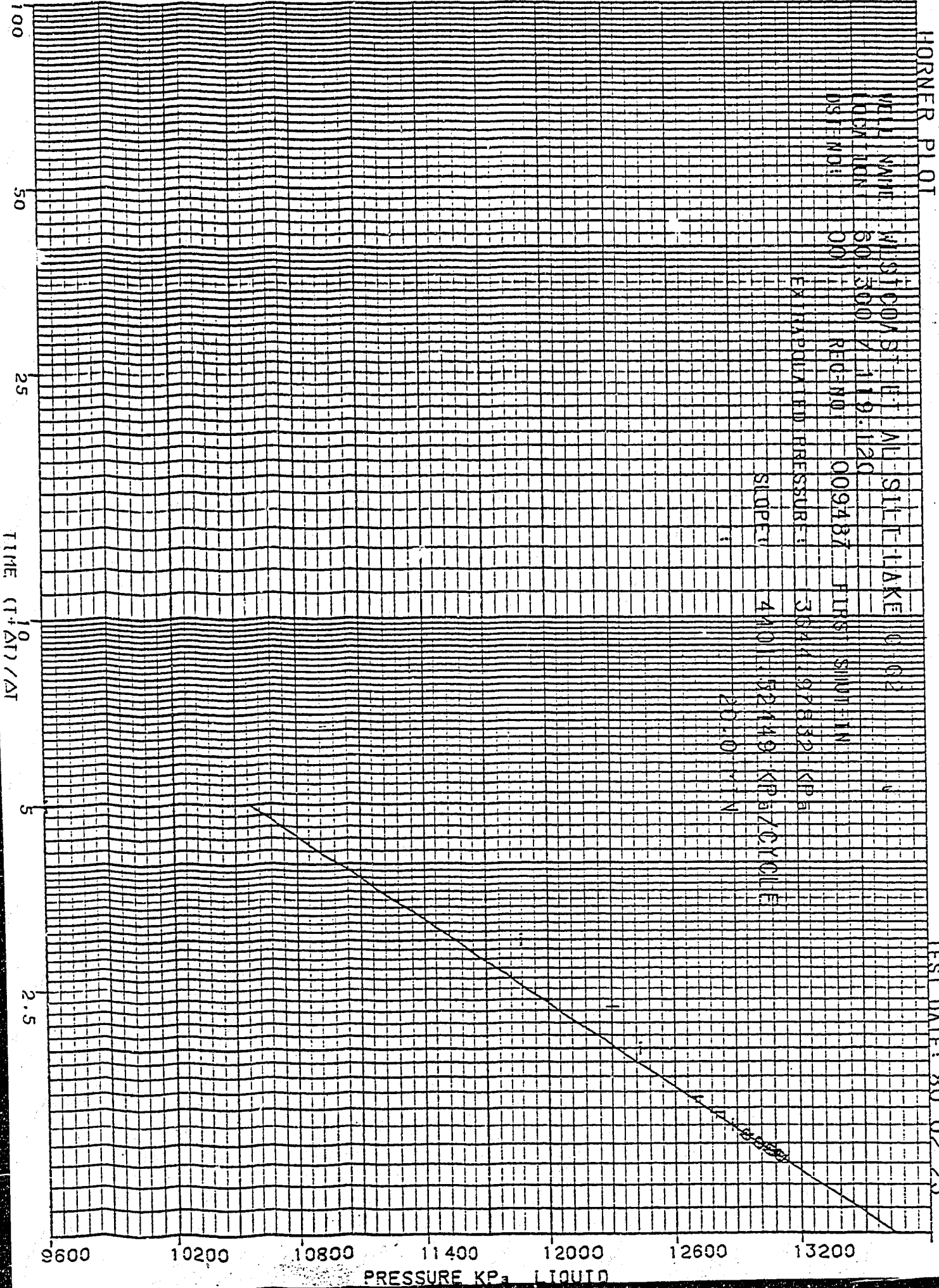
TEST DATE: 80 02 23

WELL NAME: WISCONSIN ST. AL. SILET LAKE
 DIST. IN: 501300
 REC. NO: 009437
 FIRST SUMP IN: 002

EXTRAPOLATED PRESSURE: 3824.97832 KPa

SLOPE: 4201.52449 KPa/CYCLE

20.0 MIN



WELL NAME: WESTCOAST ET AL SILT LAKE G-62
 WELL LOCATION: 60.300 / 119.120
 DST NUMBER: 001
 RECORDER NUMBER: 009487
 INTERVAL TESTED: 1670.00M TO 1637.00M
 RECORDER DEPTH: 1672.00M
 TOTAL FLOW TIME: 80.MIN

FINAL SHUT IN PRESSURE (LIQUID)

TIME (MIN) PHI	(T+PHI) /PHI	PRESSURE (KPa)
.0	.0000	7004.0
5.0	17.0000	10977.0
10.0	9.0000	11536.0
15.0	6.3333	11824.0
20.0	5.0000	12019.0
25.0	4.2000	12180.0
30.0	3.6667	12307.0
35.0	3.2857	12426.0
40.0	3.0000	12551.0
45.0	2.7778	12682.0
50.0	2.6000	12697.0
55.0	2.4545	12765.0
60.0	2.3333	12824.0
65.0	2.2308	12883.0
70.0	2.1429	12925.0
75.0	2.0667	12968.0
80.0	2.0000	13002.0
85.0	1.9412	13036.0
90.0	1.8889	13069.0 *
95.0	1.8421	13086.0 *
100.0	1.8000	13118.0 *
105.0	1.7619	13129.0 *
110.0	1.7273	13146.0 *
115.0	1.6957	13154.0 *
120.0	1.6667	13163.0 *

* VALUES USED IN HORNER ANALYSIS

SLOPE: 1781.52942 KPa/CYCLE

EXTRAPOLATED PRESSURE: 13564.2 KPa

HORNER PLOT

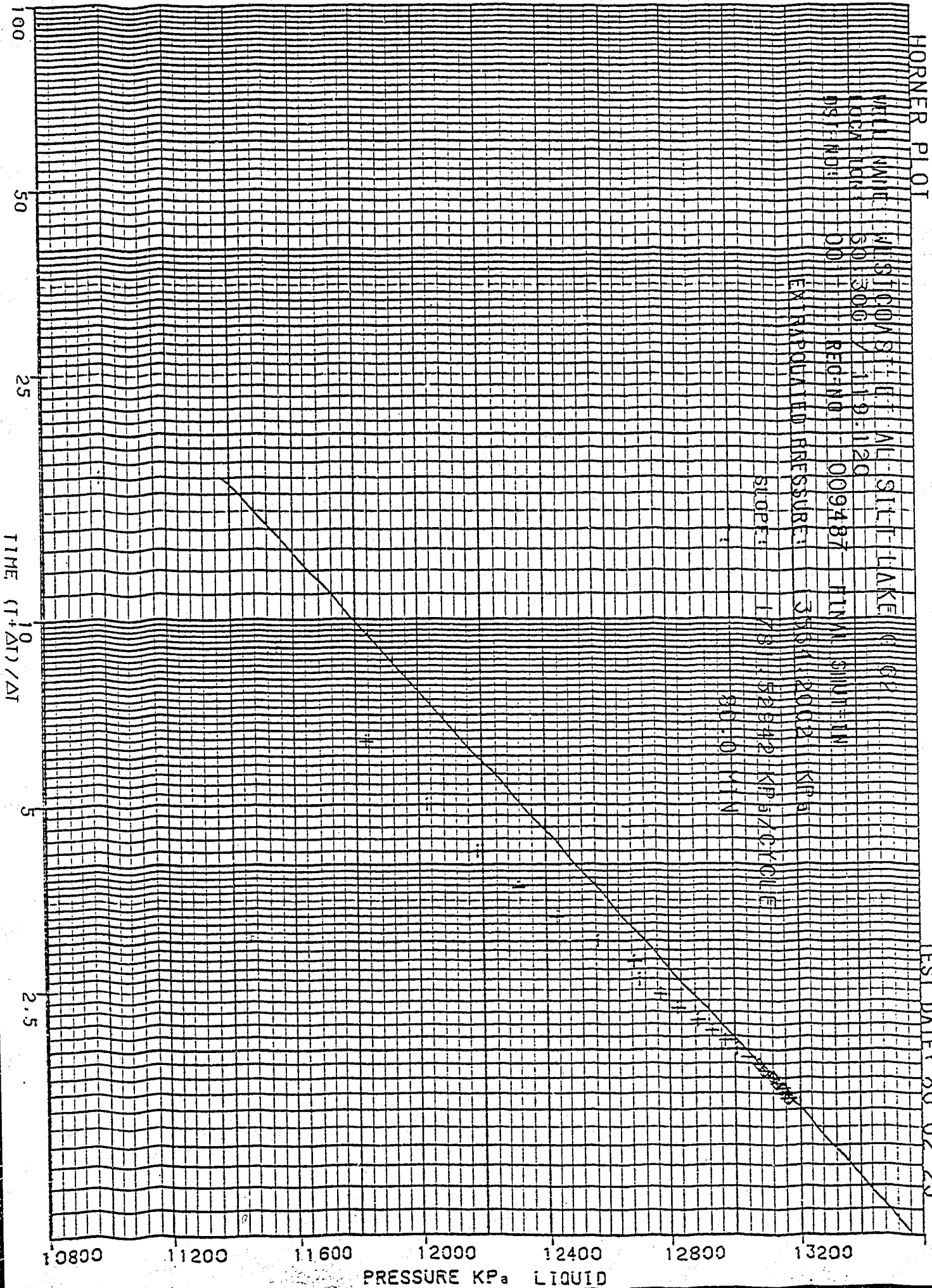
TEST DATE: 80 02 23

WELL NAME: AL-SULT-LAKE
 LOCATION: 5013006 / 119.120
 DIST-NDI: 00
 RECD-NDI: 009487
 FINAL SMDI=IN

EXTRAPOLATED PRESSURE: 3564.120021 KPa

SLOPE: 178.152942 KPa/CYCLE

30.0 MIN



PRESSURE KPa LIQUID

LYNES UNITED SERVICES LTD.

RECORDER PAGE

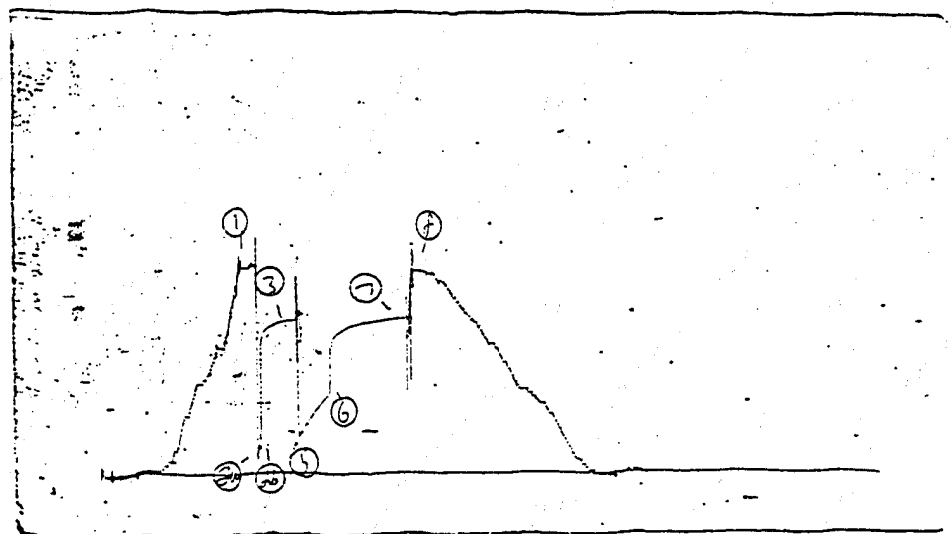
WELL NAME : WESTCOAST ET AL SILT LAKE G-62
 LOCATION : 400 / 60.300 / 119.120 / 00
 DST NUMBER : 001

RECORDER NUMBER: 009015 TYPE: K-3
 DEPTH : 1663.00 m INSIDE/OUTSIDE: INSIDE
 CAPACITY : 40334.00 kPa

	TIMES (MIN)	PRESSURES (kPa)
1ST. FLOW SHUT IN		2369.00
	20.	3333.00
	60.	13064.00
2ND. FLOW SHUT IN		3055.00
	60.	6780.00
	120.	13149.00

INITIAL HYDROSTATIC: 17586.0

FINAL HYDROSTATIC: 17586.0



LYNES UNITED SERVICES LTD.

RECORDER PAGE

WELL NAME : WESTCOAST ET AL SILT LAKE G-62
 LOCATION : 400 / 60.300 / 119.120 / 00
 DST NUMBER : 001

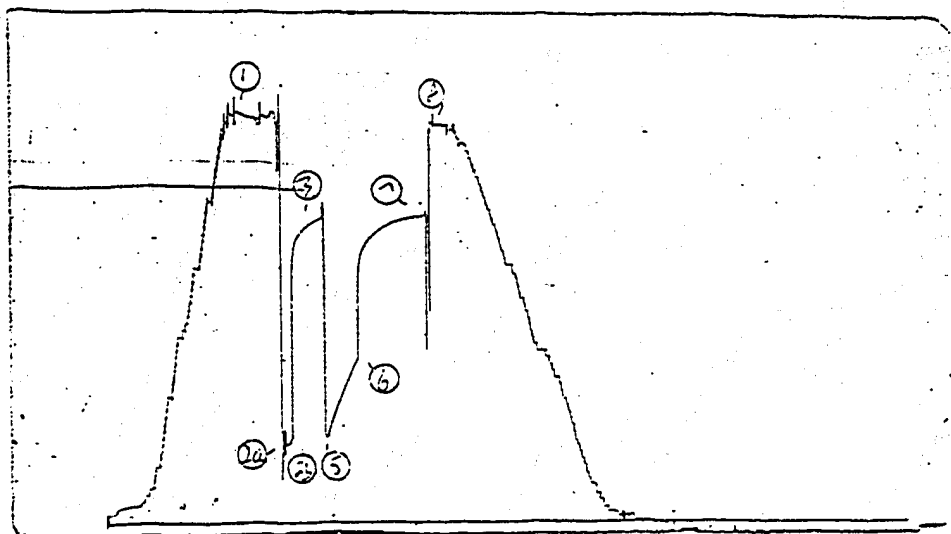
RECORDER NUMBER: 009487
 DEPTH : 1672.00 m
 CAPACITY : 20684.00 kPa

TYPE: K-3
 INSIDE/OUTSIDE: OUTSIDE

	TIMES (MIN)	PRESSURES (kPa)
1ST. FLOW SHUTIN		3242.00
	20.	3550.00
	60.	13095.00
2ND. FLOW SHUTIN		3558.00
	60.	7004.00
	120.	13163.00

INITIAL HYDROSTATIC: 17606.0

FINAL HYDROSTATIC: 17606.0



LYNES UNITED SERVICES LTD.

RECORDER PAGE

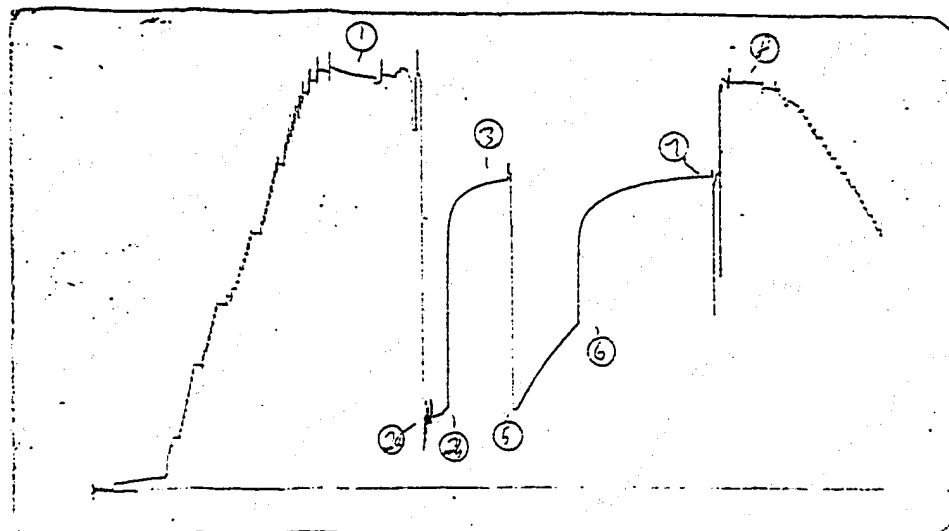
WELL NAME : WESTCOAST ET AL SILT LAKE G-62
 LOCATION : 400 / 60.300 / 119.120 / 00
 DST NUMBER : 001

RECORDER NUMBER: 009495 TYPE: K-3
 DEPTH : 1672.00 m INSIDE/OUTSIDE: OUTSIDE
 CAPACITY : 21029.00 kPa

	TIMES (MIN)	PRESSURES (kPa)
1ST. FLOW SHUT IN		3092.00
	20.	3509.30
	60.	13772.00
2ND. FLOW SHUT IN		3374.00
	60.	7185.00
	120.	13789.00

INITIAL HYDROSTATIC: 18683.0

FINAL HYDROSTATIC: 18683.0



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

14203-129 AVENUE EDMONTON ALBERTA T5L 4N9



TELEPHONE
(403) 454-1504

96 HOUR MULTIPLE CONCENTRATION STATIC BIOASSAY

DATE REPORTED: APRIL 21, 1980

LABORATORY REPORT NUMBER: EB-80-322

1. GENERAL INFORMATION

Organization or Company: WESTCOAST PETROLEUM LTD.

Land location of sample: WESTCOAST ET AL SILT LAKE G-62

Source of test water: DRILLING MUD

Sample point: _____

Name and qualification of supervising biologist: MR. P. NIX, M.Sc. (MICROBIOLOGY)

Name and qualification of individual conducting the test: MR. B. SALAHUB, B.Sc. (ZOOLOGY)

Test species: Salmo gairdneri Richardson (Rainbow Trout)

Source of test species: SPRING CREEK HATCHERY

Mean length and weight of fish $\pm$ 1 S.D.: 3 cm x 1 g.

Mortality rate of test species in the 4 days prior to test: LESS THAN 1%

Source of holding water: Dechlorinated City of Edmonton tap water @ 15°C

2. SAMPLING INFORMATION

Date sampled: _____ Time sampled: _____

Date received in lab.: MARCH 25, 1980 Time received in lab.: _____

Method of sampling: (a) grab _____ (b) Composite (24 hrs.?) AMBIENT

Handling method: (a) Temperature maintained during transport: _____

(b) Temperature maintained during storage: _____

(c) Length of storage @ 4°C: _____

(d) Pretreatment of sample: NONE

3. TEST INFORMATION

Date test started: MARCH 26, 1980

Size of test container: 2 litre

Material of test container: Glass

Volume of test solution per container: 1 litre

Number of fish per container: 2

Test temperature $\pm$ variance: 15 $\pm$ 1°C

Method of aeration: bubbler

Concentrations of test material: 10, 20, 40, 60, 80, & 100% by volume

Source of dilution water: holding water

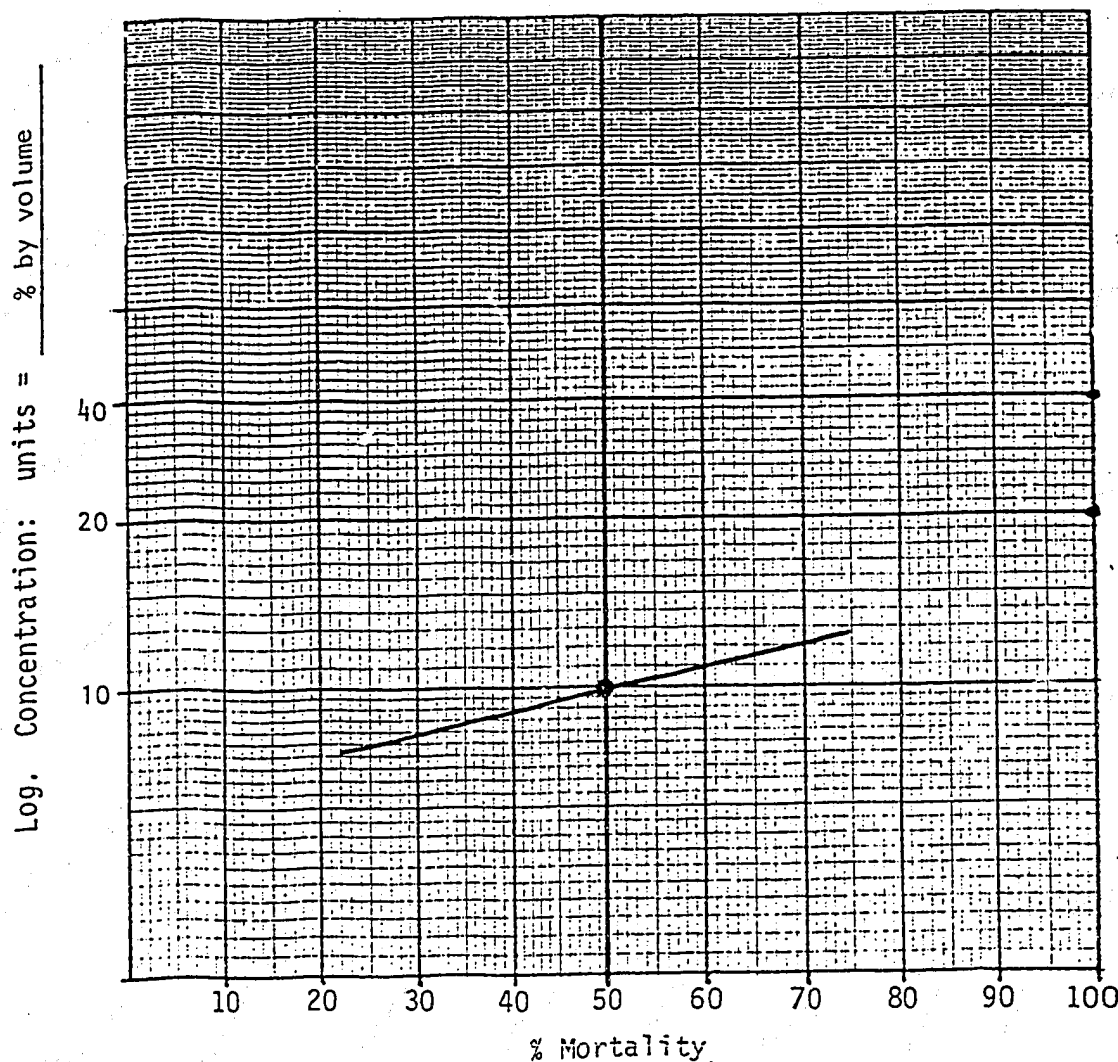
LABORATORY REPORT NUMBER: EB-80-322

Concentrations	% BY VOLUME	10	20	40	60	80	100	Control
START	Dissolved Oxygen (mg/l)	>8	>8	>8	>8	>8	>8	>8
	pH	8.2	8.5	8.6	9.7	9.4	9.7	8.1
	Temperature (°C)	15	15	15	15	15	15	15
	Other							
1/2 HR.	Number Surviving	2	2	2	2	2	2	2
	Stress (#)						2	
1 HR.	Number Surviving	2	2	2	2	2	0	2
	Stress (#)					2		
2 HRS.	Number Surviving	2	2	2	2	0	0	2
	Stress (#)				2			
4 HRS.	Number Surviving	2	2	2	2	0	0	2
	Stress (#)				2			
8 HRS.	Number Surviving	2	2	2	1	0	0	2
	Stress (#)			2	1			
24 HRS.	Number Surviving	2	2	1	0	0	0	2
	Dissolved Oxygen (mg/l)	>8	>8	>8	>8			>8
	pH	8.2	8.5	8.6	9.7			8.1
	Temperature (°C)	15	15	15	15			15
	Stress (#)			1				
48 HRS.	Number Surviving	2	2	0	0	0	0	2
	Dissolved Oxygen (mg/l)	>8	>8	>8				>8
	pH	8.2	8.5	8.6				8.1
	Temperature (°C)	15	15	15				15
	Stress (#)							

WESTCOAST PETROLEUMS LTD.

LABORATORY REPORT NUMBER: EB-80-322

Concentrations % BY VOLUME	: 10	: 20	: 40	: 60	: 80	: 100	:	:	Control
72 HRS. Number Surviving	: 2	: 0	: 0	: 0	: 0	: 0	:	:	2
Dissolved Oxygen (mg/l)	: >8	: >8	:	:	:	:	:	:	>8
pH	: 8.2	: 8.5	:	:	:	:	:	:	8.1
Temperature (°C)	: 15	: 15	:	:	:	:	:	:	15
Stress (#)	:	:	:	:	:	:	:	:	:
96 HRS. Number Surviving	: 1	: 0	: 0	: 0	: 0	: 0	:	:	2
% Survival	: 50	:	:	:	:	:	:	:	100
Dissolved Oxygen (mg/l)	: >8	:	:	:	:	:	:	:	>8
pH	: 8.1	:	:	:	:	:	:	:	8.1
Temperature (°C)	: 15	:	:	:	:	:	:	:	15
Stress (#)	:	:	:	:	:	:	:	:	:



LC50: 10% by volume

WESTCOAST PETROLEUM LTD.

LABORATORY REPORT NUMBER: EB-80-322

Oil & grease	23	g.m ⁻³
Chloride	260	g.m ⁻³
Suspended solids	20,000	g.m ⁻³
Total solids - dried	37,800	g.m ⁻³
- fixed	33,900	g.m ⁻³
- volatile	3,900	g.m ⁻³
pH	9.1	

<u>METALS</u>	<u>SOLUBLE (mg/L)</u>	<u>TOTAL (mg/L)</u>
Cadmium	<0.01	0.23
Chromium	1.44	2.45
Copper	0.133	0.694
Iron	52.	104.
Nickel	<0.02	1.16
Lead	0.45	1.03
Zinc	<0.02	2.62
Mercury	0.0004	0.0004



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON FORT ST. JOHN CANADARY



CONTAINER IDENTITY

WATER ANALYSIS

LABORATORY NUMBER

F80-1397-4

LICENCE NUMBER

OPERATOR NAME

CPANUMBER

WELL NAME

ELEVATIONS
K.B. (metres) GRD.

FIELD OR AREA

POOL OR ZONE

NAME OF SAMPLER

COMPANY

SILT LAKE

KEG RIVER

LYNES UNITED
SERVICES LTD

TEST TYPE

NO.

DST

1

TEST RECOVERY

732 M

MULTIPLE
RECOVERY

Y N

X

SAMPLING POINT

AMT. & TYPE OF CUSHION

MUD RESISTIVITY

BOTTOM

TYPE OF PRODUCTION

PUMPING

FLOWING

GAS LIFT

SWAB

PRODUCTION RATES

WATER

m³/d

OIL

m³/d

GAS

10³ m³/d

SEPARATOR

TREATER

RESERVOIR

SOURCE

GAUGE PRESSURE

kPa

SEPARATOR

TREATER

RESERVOIR

SOURCE

TEMPERATURE

°C

DATE SAMPLED (Y-M-D)

DATE RECEIVED (Y-M-D)

DATE REPORTED (Y-M-D)

ANALYST

OTHER INFORMATION

80/02/24

80/02/26

80/03/12

C.J./L.S./J.A.

ION	$\frac{m \cdot V^2}{g \cdot m^{-3}}$	Mass Fraction	$\frac{c}{mol \cdot m^{-3}}$	ION	$\frac{m \cdot V^2}{g \cdot m^{-3}}$	Mass Fraction	$\frac{c}{mol \cdot m^{-3}}$
Na	28 74	0.2999	1250.19	Cl	55 700	0.5813	1570.74
K	1 221	0.0127	31.26	Br			
Ca	6 302	0.0658	157.24	I			
Mg	1 609	0.0168	66.13	HCO ₃	854	0.0089	14.01
Ba				SO ₄	1 391	0.0146	14.47
Sr				CO ₃	0	0.0000	0.00
Fe	NIL			OH	0	0.0000	0.00
				H ₂ S	NIL		

TOTAL SOLIDS

 $\frac{m \cdot V^2}{g \cdot m^{-3}}$

EVAPORATED @ 110°C

104 900

EVAPORATED @ 180°C

AT IGNITION

88 020

CALCULATED

95 817

ORGANICS: MUCH

RELATIVE DENSITY

1.067 @ 25°C

REFRACTIVE INDEX

1.3494 @ 25°C

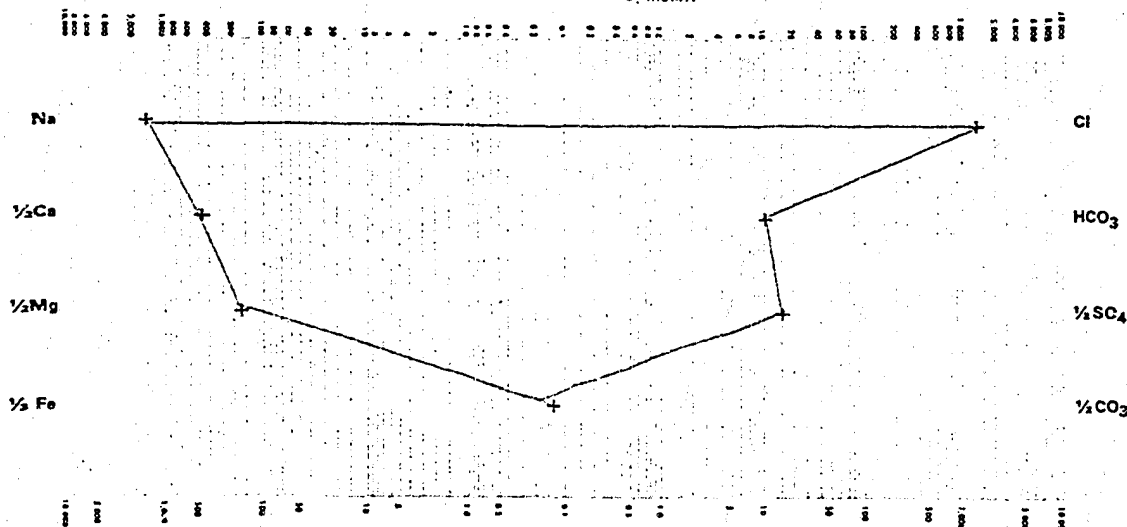
OBSERVED: pH

7.1 @ 20 °C

RESISTIVITY (Ohm m)

0.085 @ 25°C

REMARKS

Sample consisted of
muddy water with a
cloudy filtrate.LOGARITHMIC PATTERN $c/mol \cdot m^{-3}$ 

continued.....

WESTCOAST PETROLEUM LTD.

LABORATORY REPORT NUMBER: E80-1397

E80-1397-1:

Sample taken from Top

RESISTIVITY: 1.318 OHM/Meters @ 25°C

Sample consisted of muddy water with an orange filtrate.

E80-1397-2:

Sample taken from Middle #1

RESISTIVITY: 0.158 OHM/Meters @ 25°C

Sample consisted of muddy water with a yellow filtrate.

E80-1397-3:

Sample taken from Middle #2

RESISTIVITY: 0.109 OHM/Meters @ 25°C

Sample consisted of muddy water with a yellow filtrate.

WESTCOAST PETROLEUM LTD.

WESTCOAST ET AL SILT LAKE

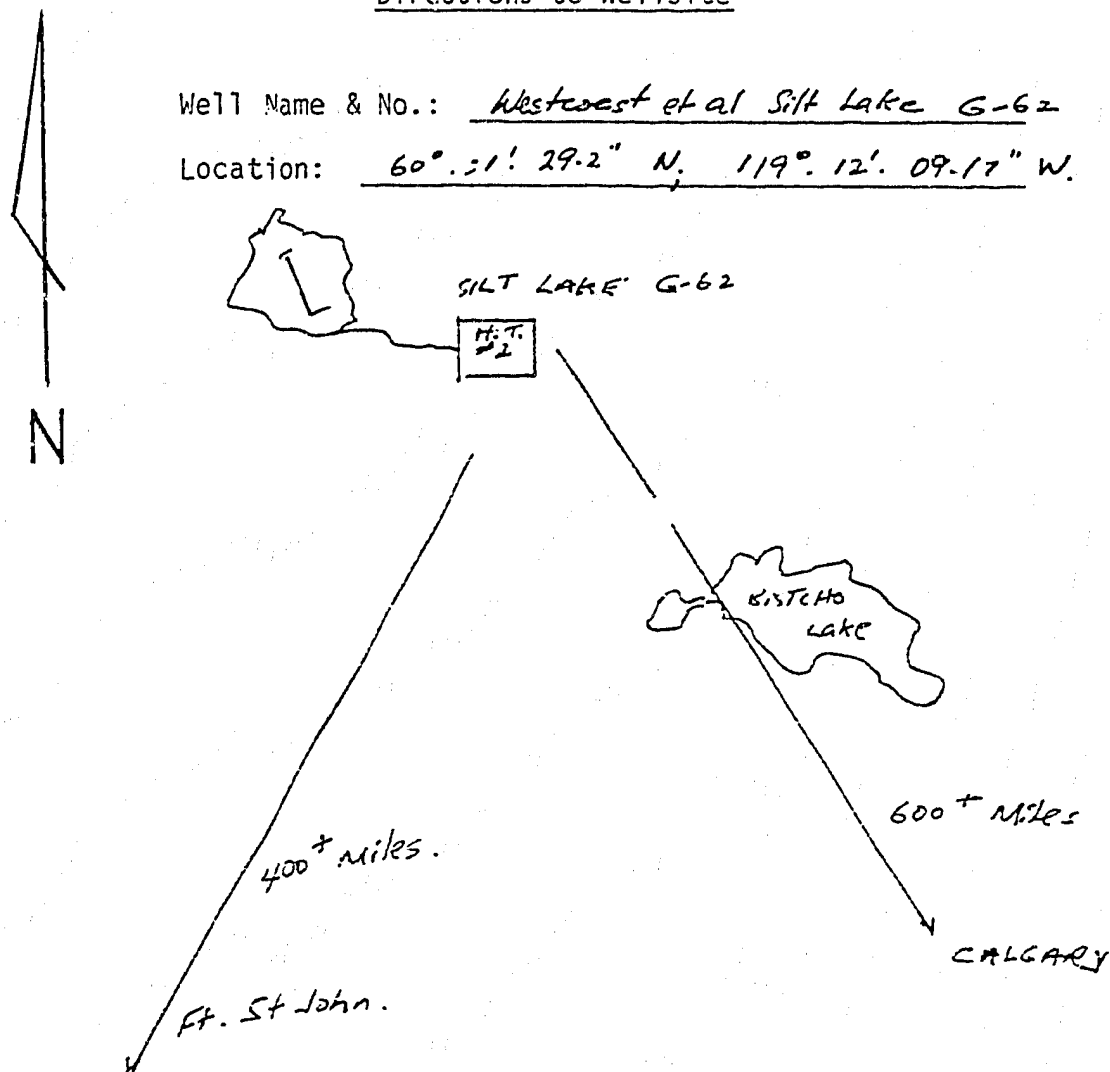
60° 01 29.21" N, 119° 12' 9.175" W

GEOLOGICAL REPORT

Noyes Supervision (1978) Ltd.

By: J.W. FULTON

Date 80 02 25

Directions to WellsiteWell Name & No.: Westcoast et al Silt Lake G-62Location: 60° 11' 29.2" N, 119° 12' 09.17" W.

Please provide a sketch of route, mileage, informational signs or any other helpful directional indicators from the nearest village, town, or city to the wellsite.

Prepared by: John Ann Van Fulton Date: Feb 25

DRILLING SUMMARYSUMMARY WELL DATA

WELL NAME: WESTCOAST ET AL SILT LAKE G-62 60° 01' 29.21" N, 119° 12' 9.175" W
 Lsd Sec Twp Rge W M.
 ELEVATIONS: Gnd 608.4 m KB 513 m KB to CF 4.6 m
 CO-ORDINATES: 60° 01' 29.21" N, 119° 12' 9.175" W
 SPUD DATE: 80 01 27 0300 Hrs. RIG RELEASE DATE: Not available
 CONTRACTOR: Hi-Tower RIG NO. 2 TYPE: Unit 34

HOLE DATA:

Surface 374.7 mm to 495 m. Second -- mm to -- m.
 Final 222 mm to m.

CASING DATA:

Surface 244 mm OD, Wt 53.57 kg/m, Grade K-55, Landed @ 495 m KB
 Cemented with 55.42 tonnes of class "G" oilwell cement plus 2% CaCl₂, plug down
80 02 02 0032 Hrs.

Sec. String mm OD, Wt kg/m, Grade , Landed @ m KB
 Cemented with

3rd String mm OD, Wt kg/m, Grade , Landed @ m KB
 Cemented with

ABANDONMENT PLUG BACK:

<u>NO.</u>	<u>m³</u>	<u>FROM</u>	<u>TO</u>	<u>REMARKS</u>

GEOLOGICAL MARKERS:

<u>FORMATION NAME</u>	<u>KB DEPTH</u>	<u>SUBSEA ELEVATION</u>
<u>Wabamun</u>	<u>539.0 m</u>	<u>+ 74.0 m</u>
<u>Winterburn</u>	<u>782.0</u>	<u>- 169.0</u>
<u>Jean Marie</u>	<u>933.0</u>	<u>- 320.0</u>
<u>Fort Simpson</u>	<u>945.0</u>	<u>- 332.0</u>
<u>Slave Point</u>	<u>1523.0</u>	<u>- 910.0</u>
<u>Watt Mountain</u>	<u>1589.0</u>	<u>- 976</u>
<u>Sulphur Point</u>	<u>1592.0</u>	<u>- 978.0</u>
<u>Keg River</u>	<u>1668.0</u>	<u>-1055.0</u>
<u>Lower Keg River</u>	<u>1756.0</u>	<u>-1143.0</u>

WELL NAME: WESTCOAST ET AL SILT LAKE G-62 Lsd Sec Twp Rge W M.

ELEVATIONS: Gnd _____ KB _____ KB to CF _____

CO-ORDINATES: _____

SPUD DATE : _____ RIG RELEASE DATE: _____

CONTRACTOR: _____ RIG NO. _____ TYPE: _____

HOLE DATA:
Surface _____ mm to _____ m. Second _____ mm to _____ m.
Final _____ mm to _____ m.

Surface _____ mm OD, Wt _____ kg/m , Grade _____, Landed @ _____ m KB
Cemented with _____

Sec. String _____ mm OD, Wt _____ kg/m , Grade _____, Landed @ _____ m KB
Cemented with _____

3rd String _____ mm OD, Wt _____ kg/m, Grade _____, Landed @ _____ m KB
Cemented with _____

[illegible]

FORMATION NAME Continued.....

Chincaga

Granite Wash

PE

Total Depth

KB DEPTH

1792.0 m

1830.0

1860.0

1885.0

SUBSEA ELEVATION

- 1179.0 m

- 1217.0

- 1247.0

- 1272.0

CORING RECORD

WELL: WESTCOAST ET AL SILT LAKE G-62

Date _____ 19__

[illegible]

DEVIATION SURVEY RECORD

DEPTH	DEVIATION ^o	DEPTH	DEVIATION ^o	DEPTH	DEVIATION ^o
33 m	zero	688 m	3/4	1449 m	1
63	zero	772	1/2	1487	2 3/4
80	1/4	841	1/4	1506	2
105	1/4	897	1/4	1525	1 3/4
130	zero	928	1/8	1544	2
148	3/4	1028	1 1/2	1572	1 3/4
184	3/4	1066	1 1/8	1600	1 1/4
212	1/4	1103	1 1/2	1628	1 1/2
240	1/2	1149	1	1666	1 3/4
264	1/2	1205	2	1681	1 1/2
296	1/2	1233	2 1/2	1722	1 1/2
325	1			1797	1 1/2
352	1	1253	2		
381	1	1281	2		
419	3/4	1309	1 1/2		
466	1/2	1347	1 1/2		
556	1/2	1375	1		
622	1/2	1412	1		

DRILLING HISTORY

PAGE 5

WELL: WESTCOAST ET AL SILT LAKE G-62

DATE _____

[illegible]

WESTCOAST ET AL SILT LAKE G-62

SAMPLE DESCRIPTIONS

<u>DEPTH</u>	<u>DESCRIPTIONS</u>
500-525 m	SHALE - Light to medium grey, micaceous, fissile, weak splintery, slightly calcareous; minor shale, light green, micaceous, weak.
525-537	SHALE - Light to medium grey, micaceous, fissile, weak, trace of plant remains, trace calcareous; minor light green micaceous shale, slightly calcareous.
<u>WABAMUN 537 m (+ 71 m)</u>	
537-539	LIMESTONE - Cream to buff, chalky matrix, massive, dense, slightly dolomitic, scattered crinoids, ostracods, fossil debris, trace argillaceous.
539-547	LIMESTONE - Cream to buff, cryptocrystalline matrix, massive dense, hard, trace of fossil debris, brachiopod fragments, slightly dolomitic.
547-551	LIMESTONE - Cream, chalk matrix, massive, scattered ostracods, brachiopods, fossil fragments, trace dolomitic, matrix partly crystallized.
551-565	LIMESTONE - Cream, buff to tan, cryptocrystalline, massive, dense, trace of nondescript algae, trace of pyrite.
565-621	LIMESTONE - Cream to buff, microcrystalline to cryptocrystalline, massive, dense, tight, slightly bituminous, trace of fossil fragments, trace of ostracods.
621-641	LIMESTONE - Cream, microcrystalline, chalk matrix, scattered ostracods, pellets, slightly dolomitic, trace argillaceous, trace bituminous.
641-680	LIMESTONE - Cream to buff, cryptocrystalline, massive, dense, tight, scattered ostracods, trace of fossil fragments, slightly dolomitic.
680-695	LIMESTONE - Cream, microcrystalline, chalk matrix, massive, tight, slightly dolomitic, trace of crinoids, ostracods, brachiopod fragments, trace bituminous.
695-715	LIMESTONE - Cream to buff, cryptocrystalline, chalk matrix, massive, dense, tight, trace of fossil debris, slightly bituminous.
715-730	LIMESTONE - Cream to buff, microcrystalline, chalk matrix, massive, scattered ostracods, pellets, fossil debris, slightly dolomitic, trace of glauconite.
730-767	LIMESTONE - Tan to cream, cryptocrystalline to microcrystalline matrix, scattered fossil fragments, trace of dolomite, slightly bituminous, very poor samples.

SAMPLE DESCRIPTIONS

-2-

WINTERBURN 767 m (-154 m)

767-778 m	LIMESTONE	- Cream to buff, cryptocrystalline matrix, massive, dense, tight, trace of fossil fragments, trace of siltstone, very poor samples.
778-812	LIMESTONE	- Tan to buff, cryptocrystalline to microcrystalline, massive, dense, scattered fossil fragments, silty in part, bituminous in part, very poor samples, trace dolomitic.
812-830	LIMESTONE	- Buff, cryptocrystalline, massive, dense, tight, scattered, brachiopod, and fossil fragments, trace dolomitic.
830-865	LIMESTONE	- Buff, cryptocrystalline to microcrystalline matrix, massive, dense, silty, slightly bituminous, scattered fossil fragments, trace pyrite, very poor samples.
865-869	SILTSTONE	- Clear to tan, sandy, argillaceous, dolomitic, trace of mica flakes; minor limestone, buff, microcrystalline, silty, massive, dense.
869-882	LIMESTONE	- Light brown, cryptocrystalline to microcrystalline, matrix, massive, dense, tight, scattered fossil fragments, argillaceous.
882-884	SHALE	- Light green, grey-green, fissile, calcareous, silty.
884-888	LIMESTONE	- Light brown, cryptocrystalline, massive, dense, silty, argillaceous, scattered fossil fragments.
888-890	SHALE	- Green, grey-green, fissile, silty, calcareous, pyritic.
890-892	SILTSTONE	- Light green to light grey, sandy, calcareous, tight, very poor sample.
892-896	LIMESTONE	- Light brown, cryptocrystalline matrix, massive, dense, fossil fragments, slightly dolomitic, trace of pyrite, very poor samples.
896-900	SILTSTONE	- Light green, sandy, argillaceous, calcareous, tight, trace of pyrite.
900-906	LIMESTONE	- Cream to light grey, mottled, microcrystalline to cryptocrystalline, massive, dense, tight, argillaceous, silty, fossil fragments, very poor sample.
906-908	SILTSTONE	- Light green, sandy, argillaceous, calcareous, tight, trace of pyrite.
908-914	LIMESTONE	- Light brown, cryptocrystalline to microcrystalline, massive, silty, argillaceous, tight, dense, trace of fossil fragments.

JEAN MARIE 914 m (-301 m)

914-915	SHALE	- Light green, grey-green, fissile, sandy, silty, very calcareous, trace of pyrite.
---------	-------	---

SAMPLE DESCRIPTIONS

-3-

- | | | |
|-----------|-----------|--|
| 915-916 m | SILTSTONE | - Light green, sandy, argillaceous, calcareous, tight, trace of pyrite. |
| 916-928 | LIMESTONE | - Cream to light brown mottled, microcrystalline to cryptocrystalline matrix, massive, dense, tight trace silty, scattered fossil fragments, minor brown bituminous shale laminations. |

FORT SIMPSON 928 m (-315 m)

- | | | |
|---------|-----------|---|
| 928-931 | SHALE | - Green, grey-green, fissile, micaceous, calcareous, pyritic. |
| 931-936 | SILTSTONE | - Light green to light grey, sandy, argillaceous, calcareous, tight, with mica flakes; minor shale, light green fissile, silty. |
| 936-938 | SHALE | - Green, grey-green, micaceous, fissile, silty, trace of pyrite. |
| 938-941 | LIMESTONE | - Cream to buff, cryptocrystalline, sandy, silty, massive, dense, tight, trace of fossil fragments. |
| 941-943 | SILTSTONE | - Light green, light grey to light green, sandy, argillaceous, micaceous, trace of pyrite, calcareous. |
| 943-949 | SHALE | - Green, grey-green, fissile, micaceous, calcareous, with light green siltstone stringers. |
| 949-952 | SILTSTONE | - Light green, sandy, argillaceous, micaceous, calcareous trace of pyrite. |
| 952-955 | SHALE | - Green, micaceous fissile, calcareous, silty, trace of pyrite. |
| 955-957 | SILTSTONE | - Light green, sandy, argillaceous, micaceous, calcareous, tight, trace of pyrite. |
| 957-966 | SHALE | - Green, grey-green, fissile, micaceous, calcareous, trace of siltstone stringers; minor sandstone stringers, light green. |
| 966-970 | SILTSTONE | - Light green, light grey to light green, sandy, argillaceous, calcareous with mica flakes, trace of pyrite. |
| 970-975 | SHALE | - Green, grey-green, fissile, with light green siltstone stringers, calcareous. |
| 975-977 | SILTSTONE | - Light green, sandy, argillaceous, calcareous, with mica flakes, trace of pyrite. |
| 977-982 | SHALE | - Green, grey-green, fissile, calcareous, silty, trace of pyrite. |
| 982-985 | SILTSTONE | - Light green, sandy, argillaceous, calcareous, with mica flakes, trace of green shale laminations. |
| 985-991 | SHALE | - Green, grey-green, micaceous fissile, silty, calcareous; interbedded with shale, red-brown, fissile, micaceous, silty. |



DAILY DRILLING REPORT

DAY WORK RECORD

28976

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION

1st Coast 115-3469

AREA TEMPLE

DATE Jan 19/80

Morning Tour — 00:00 - 08:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RHR STB CB JR	m Up On Kelly	REMARKS	Time		
Specify actual hours worked	Hrs.	From	Metres	To			No.	O.D. mm	I.D. mm	Length m	DC Force daN				Start	Stop	Interval
Driller	12	No. Size Type & Jet Size		Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick	12																
Floor	12																
Floor	12																
Floor	12																
Motor	12																
Mechanic	12																
Extra	12																
Injuries:																	
Day Tour — 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RHR STB CB JR	m Up On Kelly	REMARKS	Time		
Specify actual hours worked	Hrs.	From	Metres	To			No.	O.D. mm	I.D. mm	Length m	DC Force daN				Start	Stop	Interval
Driller	17	No. Size Type & Jet Size		Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick																	
Floor																	
Floor																	
Floor																	
Motor																	
Mechanic																	
Extra	17																
Injuries:																	
Evening Tour — 16:00 - 24:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RHR STB CB JR	m Up On Kelly	REMARKS	Time		
Specify actual hours worked	Hrs.	From	Metres	To			No.	O.D. mm	I.D. mm	Length m	DC Force daN				Start	Stop	Interval
Driller		No. Size Type & Jet Size		Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick																	
Floor																	
Floor																	
Floor																	
Motor																	
Mechanic																	
Extra																	
Injuries:																	

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolpusher

Approved by



DAILY DRILLING REPORT

DAY WORK RECORD

28977

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION

W-111 6055

G-6-2

AREA SILT LAKE DATE 30/1/80

Morning Tour — 00:00 - 08:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly	REMARKS	Time		
Specify actual hours worked	Hrs.	From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN				Start	Stop	Interval
Driller		B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION					
Derrick		I																
Floor		T																
Floor		S																
Floor			MUD			00:00	02:00	04:00	06:00	DESILTER		SURVEY		1	Next 1	FUEL		
Floor			Density kg/m ³							Stop/Start		Hrs.		Motor	Oil	Litres		
Floor			Viscosity s/L							OF		kg/m ³	UF	kg/m ³	2	Change	WATER	
Motor			Gel Pa							Flow Rate		L/min.		3	(Hours)	3	m ³	
Mechanic			Press. kPa			Pump 1				Additives			Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m) Cut
Extra			Pump 2															Next Slip
Injuries:			Pump 1															
			Pump 2															
			Liner Size mm			Pump 1												
			Pump 2															
			W.L. cm ³			F.C. mm												Boiler In Use Yes/No
			pH															
Day Tour — 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly	REMARKS	Time		
Specify actual hours worked	Hrs.	From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN				Start	Stop	Interval
Driller		B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION					
Derrick		I																
Floor		T																
Floor		S																
Floor			MUD			08:00	10:00	12:00	14:00	DESILTER		SURVEY		1	Next 1	FUEL		
Floor			Density kg/m ³							Stop/Start		Hrs.		Motor	Oil	Litres		
Floor			Viscosity s/L							OF		kg/m ³	UF	kg/m ³	2	Change	WATER	
Motor			Gel Pa							Flow Rate		L/min.		3	(Hours)	3	m ³	
Mechanic			Press. kPa			Pump 1				Additives			Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m) Cut
Extra			Pump 2															Next Slip
Injuries:			Pump 1															
			Pump 2															
			Liner Size mm			Pump 1												
			Pump 2															
			W.L. cm ³			F.C. mm												Boiler In Use Yes/No
			pH															
Evening Tour — 16:00 - 24:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly	REMARKS	Time		
Specify actual hours worked	Hrs.	From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN				Start	Stop	Interval
Driller		B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION					
Derrick		I																
Floor		T																
Floor		S																
Floor			MUD			16:00	18:00	20:00	22:00	DESILTER		SURVEY		1	Next 1	FUEL		
Floor			Density kg/m ³							Stop/Start		Hrs.		Motor	Oil	Litres		
Floor			Viscosity s/L							OF		kg/m ³	UF	kg/m ³	2	Change	WATER	
Motor			Gel Pa							Flow Rate		L/min.		3	(Hours)	3	m ³	
Mechanic			Press. kPa			Pump 1				Additives			Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m) Cut
Extra			Pump 2															Next Slip
Injuries:			Pump 1															
			Pump 2															
			Liner Size mm			Pump 1												
			Pump 2															
			W.L. cm ³			F.C. mm												Boiler In Use Yes/No
			pH															

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolpusher

Approved by



DAILY DRILLING REPORT

DAY WORK RECORD

28978

NOTE - Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 1 LOCATION West CoastAREA G-62 DATE Jan 22/80

Morning Tour - 00:00 - 08:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly	
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN			
Driller		No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION			
Derrick															
Floor															
Floor	<u>Longy Point</u> <u>16</u>	MUD		00:00	02:00	04:00	06:00	DESILTER		SURVEY		1		Next 1	FUEL
Floor	<u>Longy Point</u> <u>16</u>	Density kg/m ³						Stop/Start Hrs.				Motor Hours		Oil 2	Litres
Floor	<u>Longy Point</u> <u>16</u>	Viscosity s/L						OF kg/m ³ UF kg/m ³				3		Change (Hours) 3	WATER
Motor	<u>Longy Point</u> <u>16</u>	Gel Pa						Flow Rate L/min.				L.P.		L.P.	m ³
Mechanic		Press. kPa	Pump 1					Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m) Cut
Extra	<u>Longy Point</u> <u>16</u>	Pump 2													
Injuries:		Pump S.P.M.	Pump 1												
		Pump 2													
		Liner Size mm	Pump 1												
		Pump 2													
		W.L. cm ³	F.C. mm												
		pH													Boiler In Use Yes/No
Day Tour - 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly	
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN			
Driller		No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION			
Derrick															
Floor															
Floor		MUD		08:00	10:00	12:00	14:00	DESILTER		SURVEY		1		Next 1	FUEL
Floor		Density kg/m ³						Stop/Start Hrs.				Motor Hours		Oil 2	Litres
Floor		Viscosity s/L						OF kg/m ³ UF kg/m ³				3		Change (Hours) 3	WATER
Motor		Gel Pa						Flow Rate L/min.				L.P.		L.P.	m ³
Mechanic		Press. kPa	Pump 1					Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m) Cut
Extra		Pump 2													
Injuries:		Pump S.P.M.	Pump 1												
		Pump 2													
		Liner Size mm	Pump 1												
		Pump 2													
		W.L. cm ³	F.C. mm												
		pH													Boiler In Use Yes/No
Evening Tour - 16:00 - 24:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly	
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN			
Driller		No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION			
Derrick															
Floor															
Floor		MUD		16:00	18:00	20:00	22:00	DESILTER		SURVEY		1		Next 1	FUEL
Floor		Density kg/m ³						Stop/Start Hrs.				Motor Hours		Oil 2	Litres
Floor		Viscosity s/L						OF kg/m ³ UF kg/m ³				3		Change (Hours) 3	WATER
Motor		Gel Pa						Flow Rate L/min.				L.P.		L.P.	m ³
Mechanic		Press. kPa	Pump 1					Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m) Cut
Extra		Pump 2													
Injuries:		Pump S.P.M.	Pump 1												
		Pump 2													
		Liner Size mm	Pump 1												
		Pump 2													
		W.L. cm ³	F.C. mm												
		pH													Boiler In Use Yes/No

14-0442

Toolpusher Neil St. JohnApproved by Neil St. John

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)



DAILY DRILLING REPORT

DAY WORK RECORD

28979

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS

RIG NO. 1 LOCATION WEST LAKE ET AL G62 AREA SUT LAKE DATE JUN 13/80

Morning Tour — 00:00 - 08:00														REMARKS										Start	Stop	Interval		
Specify actual hours worked	Hrs.	METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly												
		From	Metres	To					No.	O.D. mm	I.D. mm	Length m	DC Force daN															
Driller		No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION																
Derrick																												
Floor																												
Floor		MUD				00:00	02:00	04:00	06:00	DESILTER		SURVEY		1		Next 1	FUEL											
Floor		Density kg/m³								Stop/Start Hrs.				Motor Hours		Oil Change (Hours)	Litres											
Floor		Viscosity s/L								OF kg/m³ UF kg/m³				3		3	WATER											
Motor		Gel Pa								Flow Rate L/min.				L.P.		L.P.	m³											
Mechanic		Press. kPa	Pump 1	Pump 2					Additives	Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip											
Extra																												
Injuries:		Pump S.P.M.	Pump 1	Pump 2	GENERAL																							
		Liner Size mm	Pump 1	Pump 2																								
		W.L. cm³	F.C. mm	pH																								
Day Tour — 08:00 - 16:00																								Boiler In Use	Yes/No			
Specify actual hours worked	Hrs.	METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly												
		From	Metres	To					No.	O.D. mm	I.D. mm	Length m	DC Force daN															
Driller		No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION																
Derrick																												
Floor																												
Floor		MUD				08:00	10:00	12:00	14:00	DESILTER		SURVEY		1		Next 1	FUEL											
Floor		Density kg/m³								Stop/Start Hrs.				Motor Hours		Oil Change (Hours)	Litres											
Floor		Viscosity s/L								OF kg/m³ UF kg/m³				3		3	WATER											
Motor		Gel Pa								Flow Rate L/min.				L.P.		L.P.	m³											
Mechanic		Press. kPa	Pump 1	Pump 2					Additives	Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip											
Extra																												
Injuries:		Pump S.P.M.	Pump 1	Pump 2	GENERAL																							
		Liner Size mm	Pump 1	Pump 2																								
		W.L. cm³	F.C. mm	pH																								
Evening Tour — 16:00 - 24:00																								Boiler In Use	Yes/No			
Specify actual hours worked	Hrs.	METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STB CB JR	m Up On Kelly												
		From	Metres	To					No.	O.D. mm	I.D. mm	Length m	DC Force daN															
Driller		No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION																
Derrick																												
Floor																												
Floor		MUD				16:00	18:00	20:00	22:00	DESILTER		SURVEY		1		Next 1	FUEL											
Floor		Density kg/m³								Stop/Start Hrs.				Motor Hours		Oil Change (Hours)	Litres											
Floor		Viscosity s/L								OF kg/m³ UF kg/m³				3		3	WATER											
Motor		Gel Pa								Flow Rate L/min.				L.P.		L.P.	m³											
Mechanic		Press. kPa	Pump 1	Pump 2					Additives	Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip											
Extra																												
Injuries:		Pump S.P.M.	Pump 1	Pump 2	GENERAL																							
		Liner Size mm	Pump 1	Pump 2																								
		W.L. cm³	F.C. mm	pH																								
																								Boiler In Use	Yes/No			

14-0442

Shock Sub Start/Stop

Camp/Start/Stop 40-01-72

Ambulance & Medic (Start/Stop)

· Toolpusher

Approved by _____

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)





DAILY DRILLING REPORT

DAY WORK RECORD

28981

NOTE - Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION West Coast Lake 442

AREA SUT LAKE DATE Jan 15/80

Morning Tour - 00:00 - 08:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	FEED	m Up On Kelly	REMARKS	Start	Stop	Interval
Specify actual hours worked		From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN						
Driller	Hrs.	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick																		
Floor																		
Floor																		
Floor																		
Floor																		
Motor																		
Mechanic																		
Extra																		
Injuries:																		
Day Tour - 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	FEED	m Up On Kelly				
Specify actual hours worked		From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN						
Driller	Hrs.	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick																		
Floor																		
Floor																		
Floor																		
Floor																		
Motor																		
Mechanic																		
Extra																		
Injuries:																		

Evening Tour - 16:00 - 24:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	FEED	m Up On Kelly	REMARKS	Start	Stop	Interval
Specify actual hours worked		From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN						
Driller	Hrs.	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick																		
Floor																		
Floor																		
Floor																		
Floor																		
Motor																		
Mechanic																		
Extra																		
Injuries:																		

ub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolpusher

Approved by



DAILY DRILLING REPORT

DAY WORK RECORD

28983

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 02 LOCATION 2nd road 1st 6-62 AREA 110 E. DATE 20-01-99		REMARKS		Start	Stop	Interval
Morning Tour — 00:00 - 08:00						
Specify actual hours worked						
Driller Joe Schedlock 12	METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles
Derrick Allen P 12	From 0 To 33		4 1/2	2000		
Floor 12	No. Size Type & Jet Size		Serial No.	Force on Bit daN	R.P.M.	m Drilled
Floor 12	1A 374 DSC 1C		28503	110	120	51
Floor 12	MUD		DESILTER	SURVEY		
Floor 12	Density kg/m ³		Stop/Start Hrs.	Motor Hours		
Floor 12	Viscosity s/L		OF kg/m ³ UF kg/m ³	33M 0°		
Motor 12	Gel Pa		Flow Rate L/min.	63M 0°		
Mechanic	Press. kPa		Additives	Size Trips		No. Lines
Extra	Pump 1		500	45.1 gal		
Injuries	Pump 2		300	300		
		Pump S.P.M.		GENERAL		
		Liner Size mm		1-1 line		
		W.L. cm ³		F.C. mm		pH
Day Tour — 08:00 - 16:00						
Specify actual hours worked						
Driller Van Bluest 12	METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles
Derrick Mick Baskin 12	From 33 To 51		1 1/2	2000		
Floor 12	No. Size Type & Jet Size		Serial No.	Force on Bit daN	R.P.M.	m Drilled
Floor 12	1A 374 DSC 1C		28503	110	120	51
Floor 12	MUD		DESILTER	SURVEY		
Floor 12	Density kg/m ³		Stop/Start Hrs.	Motor Hours		
Floor 12	Viscosity s/L		OF kg/m ³ UF kg/m ³	33M 0°		
Motor 12	Gel Pa		Flow Rate L/min.	63M 0°		
Mechanic	Press. kPa		Additives	Size Trips		No. Lines
Extra	Pump 1		500	45.1 gal		
Injuries	Pump 2		300	300		
		Pump S.P.M.		GENERAL		
		Liner Size mm		1-1 line		
		W.L. cm ³		F.C. mm		pH
Evening Tour — 16:00 - 24:00						
Specify actual hours worked						
Driller	METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles
Derrick	From 51 To 54		6 1/2	2000		
Floor	No. Size Type & Jet Size		Serial No.	Force on Bit daN	R.P.M.	m Drilled
Floor	1A 374 DSC 1C		28503	110	120	51
Floor	MUD		DESILTER	SURVEY		
Floor	Density kg/m ³		Stop/Start Hrs.	Motor Hours		
Floor	Viscosity s/L		OF kg/m ³ UF kg/m ³	33M 0°		
Motor	Gel Pa		Flow Rate L/min.	63M 0°		
Mechanic	Press. kPa		Additives	Size Trips		No. Lines
Extra	Pump 1		500	45.1 gal		
Injuries	Pump 2		300	300		
		Pump S.P.M.		GENERAL		
		Liner Size mm		1-1 line		
		W.L. cm ³		F.C. mm		pH

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolpusher

Approved by



DAILY DRILLING REPORT

DAY WORK RECORD

28984

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS

RIG NO. 2 LOCATION North of Tel G-62 AREA Silt Lake DATE Jan 28 80

Morning Tour — 00:00 - 08:00		METRES DRILLED			Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RHH STD CR JR	m On Kelly
Specify actual hours worked	Hrs.	From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN		
Driller Joe Schedlacker	12	105	40	145	6	2000		15	120	11	125			
Derrick Glenn Ryle	12	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION		
Floor Glen T. Tatch	12	1A	374	OSCIC	72503	15000	1	145	16					
Floor J.R. Adams	12	MUD				00:00	02:00	04:00	06:00	DESILTER		SURVEY		
Floor Kent Reid	12	Density kg/m³								Stop/Start		Hrs.	120	AS
Motor Glen Peters	12	Viscosity s/L				42	45	55		OF		kg/m³	UF	kg/m³
Mechanic		Gel Pa								Flow Rate		L/min.		
Extra		Press. kPa	Pump 1			Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut
Injuries		Pump S.P.M.	Pump 1			1000		GENERAL						
			Pump 2			1000		1000						
		Liner Size mm	Pump 1			140 x 331		the agent of new gravel & bulldozers 1000 - 1300m						
			Pump 2					new gravel						
		W.L. cm³	F.C. mm			pH 10								

Day Tour — 08:00 - 16:00		METRES DRILLED			Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Keel	
Specify actual hours worked	Hrs.	From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN			
Driller <i>Ben Blackett</i>	12	145	57	202	6 1/2	36000		950	20	153	180			0	
Derrick <i>Mark Blackett</i>	12	B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION		
Floor <i>Paul Miller</i>	12	I	1A	374	OSC 10	713503	15000	140	202	22 1/2			D. 2		
Floor <i>Frank Kelly</i>	12	S													
Motor <i>Paul Brackley</i>	12	MUD				08:00	10:00	12:00	14:00	DESILTER		SURVEY		FUEL	
Mechanic		Density kg/m³				Stop/Start	Hrs.	149m	3/4	Motor Hours	1	Next 1	Litre		
Extra		Viscosity s/L				OF	kg/m³	UF	kg/m³	194m	3/4	2	Oil 2	WATER	
Injuries:		Gel Pa				Flow Rate	L/min.				3	Change (Hours) 3	m		
		Press. kPa	Pump 1			Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip
			Pump 2												
		Pump S.P.M.	Pump 1			GENERAL									
			Pump 2												
		Liner Size mm	Pump 1												
			Pump 2												
		W.L. cm³	F.C. mm	pH											

Evening Tour -- 16:00-24:00		METRES DRILLED							Hours On Bottom		Force of Drill String daN		Stands		Singles		DRILL COLLARS					SS RMR STB CB JR		m Up m Ke	
Specify actual hours worked		Hrs.	From	Metres	To							No.	O.D. mm	I.D. mm	Length m	DC Force daN									
Driller			202	48	250				63	37000	1	2	30	120	71	180									
Derrick			B	No.	Size	Type & Jet Size		Serial No.		Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION									
Floor			I	1A	274	DSC IG		ZB503		14000	140	250	394												
Floor			S																						
Floor				MUD	16:00	18:00	20:00	22:00	DESILTER			SURVEY				1 _____		Next 1 _____		FUEL					
Floor				Density kg/m³			50	47	Stop/Start		Hrs.	212	14	Motor Hours		2 _____	Oil Change (Hours)		2 _____	Litra					
Motor				Viscosity s/L					OF kg/m²		UF kg/m²	240	15	3 _____		3 _____		3 _____		WATER					
Mechanic				Gel Pa					Flow Rate		L/min.			L.P.		L.P.				r					
Extra				Press. kPa	Pump 1				Additives			Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip						
Injuries:					Pump 2							GENERAL													
					Pump 1																				
					Pump 2																				
				Liner Size mm	Pump 1																				
					Pump 2																				
				W.L. cm³	F.C. mm	pH																			

REMARKS	Time		
	Start	Stop	Interval
Rig Service	0800	0815	1/4
Drill 374 - Hole	0815	0830	1/4
Survey	0830	0845	1/4
Drill	0845	1315	4 1/2
Survey circle prior to run	1315	1345	1/2
Drill	1345	1530	1 3/4
Change pump rock	1530	1600	1/2
Boiler In Use ☒ Yes/No			
Rig serv	1600	1615	1/4
Change pump and	1615	1630	1/4
Drill	1630	1745	1 1/4
Survey	1745	1900	1 1/4
Drill	1800	1930	1 1/2
Work on #1 pump	1930	1945	1/4
Drill	1945	2145	2
Survey	2145	2200	1/4
Drill 374 - Hole	2200	2400	2
Boiler In Use ☒ Yes/No			

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Toolpusher

Approved by _____

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)



DAILY DRILLING REPORT

DAY WORK RECORD

28985

RIG NO. 2 LOCATION

AREA Site Lake N.W.T. DATE Jan 29, 90

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

Morning Tour — 00:00 - 08:00		Specify actual hours worked		Hrs.	METRES DRILLED		From	Metres	To	Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	
Driller	Joe Schedlosky	12			250	11				2	3400	2	2	No.	O.D. mm	I.D. mm	Length m	DC Force daN	EST 7000	EEEEEE
Derrick	Alvin Pyle	12			12	349	OSCIG	7P 503	1100	410	10			Hrs.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION	
Floor	Glen McIntosh	12			12	349	1175	544	454											
Floor	J.C. Adani	12			MUD		00:00	02:00	04:00	06:00	DESILTER		SURVEY		1		Next 1		FUEL	
Floor	Kent Reid	12			Density kg/m ³					Stop/Start	Hrs.			Motor Hours	2			Oil Change (Hours)	2	Litres
Motor	Don Peters	12			Viscosity s/L	43				OF	kg/m ³	UF	kg/m ³					3		WATER
Mechanic					Gel Pa					Flow Rate	L/min.			L.P.				L.P.		m ³
Extra					Press. kPa	Pump 1				Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip	
Injuries:					Pump S.P.M.	Pump 1														
					Liner Size mm	Pump 1														
					W.L. cm ³	F.C. mm				pH										
Day Tour — 08:00 - 16:00		Specify actual hours worked		Hrs.	METRES DRILLED		From	Metres	To	Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	
Driller	Ken Elgent	12			264	61				6	37000	4	2	No.	O.D. mm	I.D. mm	Length m	DC Force daN	BS-70	EEEEEE
Derrick	Bob Backin	12			2A	349	3/18	20	1500	140	61	6		Hrs.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION	
Floor	Bill Min	12			12	349	544	854	8000											
Floor	Fusunk Sholly	12			MUD		08:00	10:00	12:00	14:00	DESILTER		SURVEY		1		Next 1		FUEL	
Floor					Density kg/m ³					Stop/Start	Hrs.			Motor Hours	2			Oil Change (Hours)	2	Litres
Motor	Jack Bonathwaite	12			Viscosity s/L	60	65	70	60	OF	kg/m ³	UF	kg/m ³					3		WATER
Mechanic					Gel Pa					Flow Rate	L/min.			L.P.				L.P.		m ³
Extra					Press. kPa	Pump 1				Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip	
Injuries:					Pump S.P.M.	Pump 1														
					Liner Size mm	Pump 1														
					W.L. cm ³	F.C. mm				pH										
Evening Tour — 16:00 - 24:00		Specify actual hours worked		Hrs.	METRES DRILLED		From	Metres	To	Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	
Driller					325	50				7	37000	6	2	No.	O.D. mm	I.D. mm	Length m	DC Force daN	BIT Sud 70	EEEEEE
Derrick					2A	349	1175	544	854	15000	140	60	13							
Floor					MUD		16:00	18:00	20:00	22:00	DESILTER		SURVEY		1		Next 1		FUEL	
Floor					Density kg/m ³					Stop/Start	Hrs.			Motor Hours	2			Oil Change (Hours)	2	Litres
Motor					Viscosity s/L	60	75	65		OF	kg/m ³	UF	kg/m ³					3		WATER
Mechanic					Gel Pa					Flow Rate	L/min.			L.P.				L.P.		m ³
Extra					Press. kPa	Pump 1				Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip	
Injuries:					Pump S.P.M.	Pump 1														
					Liner Size mm	Pump 1														
					W.L. cm ³	F.C. mm				pH										

REMARKS	Start	Time	Interval
Rig Service	5:00	5:15	1/4
Drill 349 Hole	5:15	5:25	2"
Tap for bit	5:25	5:40	5/4"
Ream 1st 10'	5:40	7:00	2"
a Tap in	7:00	7:50	1"
Boiler In Use	Yes/No		
Run in with bit #2	08:00	09:30	1/2
Drill	08:30	11:30	3"
Line prior to survey	11:30	12:00	1/2
Drill	12:00	13:00	1"
Work on #1 pump	13:00	13:15	1/4
Drill	13:15	13:45	1/2
Work on Downer	13:45	14:15	1/2
Drill	14:15	15:45	1 1/2
Survey	15:45	16:00	1/4
Boiler In Use	Yes/No		
Drill	16:00	17:30	1 1/2
Use ball bit	17:30	18:00	1/2
Drill	18:00	20:30	2 1/2
Survey	20:30	21:00	1/2
Drill 349 Hole	21:00	22:15	1 1/4
Work on #1 pump	22:15	24:00	1 3/4
Boiler In Use	Yes/No		

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolpusher

Approved by



DAILY DRILLING REPORT

DAY WORK RECORD

28986

RIG NO. 2 LOCATION West coast 6-62

AREA Silt Lake N.W.T. DATE Jan 20 80

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

Morning Tour — 00:00 - 08:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	REMARKS	Start	Time	Interval
Specify actual hours worked		From	To					No.	O.D. mm	I.D. mm	Length m	DC Force daN					
Driller	Joe Schedlosky 12	375	400	4	38000	7	1	20	150	71	180						
Derrick	Alvin Pyle 12	2A	349	115	544854			100	17								
Floor	J.C. A. Jari 12																
Floor	Kent Reid 12																
Floor																	
Motor	Don Peters 12																
Mechanic																	
Extra																	
Injuries:																	
Day Tour — 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	REMARKS	Start	Time	Interval
Specify actual hours worked		From	To					No.	O.D. mm	I.D. mm	Length m	DC Force daN					
Driller	Ken Hunt 12	400	409	3/4	3000	7	2	20	150	180							
Derrick	Mark Bleskin 12	2	349	3/18	544854	11000	140	180									
Floor	Bill Allen 12	3	349	0 per	136164	8000	140	9	3/4								
Floor	Frank Sholly 12																
Floor																	
Motor	Jack Branthwaite 12																
Mechanic																	
Extra																	
Injuries:																	
Evening Tour — 16:00 - 24:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	REMARKS	Start	Time	Interval
Specify actual hours worked		From	To					No.	O.D. mm	I.D. mm	Length m	DC Force daN					
Driller		409	47	456	42	38000	9	1	20	150	180						
Derrick		3A	349	Open	136164	8000	140	56	5								
Floor																	
Floor																	
Floor																	
Motor																	
Mechanic																	
Extra																	
Injuries:																	

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Toolpusher

Approved by

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

DAILY DRILLING REPORT

DAY WORK RECORD

28987

RIG NO. 2 LOCATION Westcott G-2 Silf Lake AREA N.W.T. DATE Jan 31, 80

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

Morning Tour — 00:00 - 08:00		METRES DRILLED										DRILL COLLARS										REMARKS		Time		
Specify actual hours worked		From Metres		To		Hours On Bottom	Force of Drill String daN	Stands	Singles	No.	O.D. mm	I.D. mm	Length m	DC Force daN	SS RMR STB CB JR	m Up On Kelly	Start	Stop	Interval							
Driller	Joe Schedlacker	12	456	79	445	3:14	34000	10	1	20	152	71	120			0	Rig Service	0:00	0:15	1/4						
Derrick	Alvin Pyle	12															Drill 349mm Hole	0:15	1:00	3/4						
Floor	J.C. Adani	12															work + circulate hole, priming pump	1:00	1:30	1/2						
Floor	Kent Reid	12															unball bit 3T in down hole	1:30	2:00	1/2						
Floor																	Drill 349mm Hole	2:00	2:15	1/4						
Floor																	Work on pump	2:15	2:30	1/4						
Motor	Don Peters	12															Drill 349mm Hole	2:30	4:00	1 1/2						
Mechanic																	Work on pump	4:00	4:15	1/4						
Extra																	Drill 349mm Hole	4:15	5:00	3/4						
Injuries:																	circulate for dummy Trip 435"	5:00	5:15	1/4						
																	dummy Trip (Hole very tight)	5:15	08:00	2 3/4						
Boiler In Use Yes/No																										
Day Tour — 08:00 - 16:00		METRES DRILLED										DRILL COLLARS										REMARKS		Time		
Specify actual hours worked		From Metres		To		Hours On Bottom	Force of Drill String daN	Stands	Singles	No.	O.D. mm	I.D. mm	Length m	DC Force daN	SS RMR STB CB JR	m Up On Kelly	Start	Stop	Interval							
Driller	Ken Stuart	12	495					10	1	20	152	71	120				Rig Service	08:00	08:15	1/4						
Derrick	Mark Plaskin	12															Finish logging bit 3A	08:15								
Floor	Bill Miles	12															SL Most clean logged									
Floor	Frank Skelley	12															bit + plugged BS run in									
Floor																	to 200m	12:00	3 3/4							
Motor	Bob Braithwaite	12															200m clean bridge condition	12:00								
Mechanic																	200 - 1245m bridge + run									
Extra																	run in	15:30	3 1/2							
Injuries:																	Unball bit	15:30	16:00	1/2						
Boiler In Use Yes/No																										
Evening Tour — 16:00 - 24:00		METRES DRILLED										DRILL COLLARS										REMARKS		Time		
Specify actual hours worked		From Metres		To		Hours On Bottom	Force of Drill String daN	Stands	Singles	No.	O.D. mm	I.D. mm	Length m	DC Force daN	SS RMR STB CB JR	m Up On Kelly	Start	Stop	Interval							
Driller								10	1	20	152	71	120				Disc contaminated & mud	16:00								
Derrick																	clean mud rings	19:30	3 1/2							
Floor																	Below hole to make									
Floor																	clearway trip	19:30	20:00	1/2						
Floor																	Trip 0.5"	20:00	20:00	3						
Motor																	Run Back	20:00	22:45	3/4						
Mechanic																	circulate bridge (230 - 280m)	23:45	24:00	1/4						
Extra																										
Injuries:																										
Boiler In Use Yes/No																										

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolpusher

Approved by

John H. H. H.
HP

DAILY DRILLING REPORT

DAY WORK RECORD

28989

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

0. 2 LOCATION Westcoast G-62 Salt Lake AREA N-WT DATE Feb 2/80

METRES DRILLED		Hours On Bottom		Force of Drill String daN		Stands		Singles		DRILL COLLARS					m Up On Kelly		
From	To	Metres								No.	O.D. mm	I.D. mm	Length m	DC Force daN			
Working Tour — 00:00 - 08:00 pecify actual hours worked Hrs. <u>4.95</u> <u>Ken Alcott</u> <u>3</u> <u>Mark Boskin</u> <u>3</u> <u>Jeff Miller</u> <u>3</u> <u>W.D.C.</u> <u>3</u>																	
MUD		00:00		02:00		04:00		06:00		DESILTER		SURVEY		1		FUEL	
Density kg/m ³										Stop/Start Hrs.				Motor Hours		Next Oil Change (Hours)	
Viscosity s/L										OF kg/m ³ UF kg/m ³				3		L.P.	
Gel Pa										Flow Rate L/min.				L.P.		m ³	
Press. kPa		Pump 1		Pump 2		Pump 1		Pump 2		Additives		Size Trips		No. Lines		TOTAL MJ	
Pump S.P.M.		Pump 1		Pump 2		Pump 1		Pump 2		GENERAL							
Liner Size mm		Pump 1		Pump 2		Pump 1		Pump 2									
W.L. cm ³		F.C. mm		pH													
Day Tour — 08:00 - 16:00 pecify actual hours worked Hrs. <u>1.2</u> <u>Ken Alcott</u> <u>1.2</u> <u>W.D.C.</u> <u>1.2</u>																	
MUD		08:00		10:00		12:00		14:00		DESILTER		SURVEY		1		FUEL	
Density kg/m ³										Stop/Start Hrs.				Motor Hours		Next Oil Change (Hours)	
Viscosity s/L										OF kg/m ³ UF kg/m ³				3		L.P.	
Gel Pa										Flow Rate L/min.				L.P.		m ³	
Press. kPa		Pump 1		Pump 2		Pump 1		Pump 2		Additives		Size Trips		No. Lines		TOTAL MJ	
Pump S.P.M.		Pump 1		Pump 2		Pump 1		Pump 2		GENERAL							
Liner Size mm		Pump 1		Pump 2		Pump 1		Pump 2									
W.L. cm ³		F.C. mm		pH													
Evening Tour — 16:00 - 24:00 pecify actual hours worked Hrs. <u>4</u> <u>Ken Alcott</u> <u>4</u> <u>Mark Boskin</u> <u>4</u> <u>Jeff Miller</u> <u>4</u> <u>W.D.C.</u> <u>4</u>																	
MUD		16:00		18:00		20:00		22:00		DESILTER		SURVEY		1		FUEL	
Density kg/m ³										Stop/Start Hrs.				Motor Hours		Next Oil Change (Hours)	
Viscosity s/L										OF kg/m ³ UF kg/m ³				3		L.P.	
Gel Pa										Flow Rate L/min.				L.P.		m ³	
Press. kPa		Pump 1		Pump 2		Pump 1		Pump 2		Additives		Size Trips		No. Lines		TOTAL MJ	
Pump S.P.M.		Pump 1		Pump 2		Pump 1		Pump 2		GENERAL							
Liner Size mm		Pump 1		Pump 2		Pump 1		Pump 2									
W.L. cm ³		F.C. mm		pH													

REMARKS	Time		
	Start	Stop	Interval
<u>This cement down pump</u>	<u>0800</u>		
<u>plug, line out Halliburton</u>	<u>0830</u>	<u>0830</u>	<u>3 1/2</u>
<u>W.D.C.</u>	<u>0830</u>	<u>0800</u>	<u>7 1/2</u>
<u>W.D.C.</u>	<u>0800</u>	<u>0830</u>	
<u>cut off casing + weld</u>	<u>0830</u>	<u>1130</u>	
<u>on board</u>	<u>1130</u>	<u>1600</u>	
<u>Nipple up</u>	<u>1600</u>	<u>2400</u>	<u>8</u>

Sub Start/Stop _____ Camo Start/Stop _____ Ambulance & Medic Start/Stop _____

Toolpusher Mark Boskin Approved by _____

203411

2 LOCATION West coast C-162 Little Lake AREA NWT DATE Feb 3/80

[illegible]

Approved by _____

CALGARY OFFICE COPY.

DAILY DRILLING REPORT

DAY WORK RECORD

28993

NOTE - Please show metres drilled while "Control Drilling" as well as HOURS.

LOCATION Westcoast C-62 - Little Lake AREA NWT DATE Feb 6/80

Day Tour - 00:00 - 08:00
 Hrs. 4
 Density kg/m³ 1080
 Viscosity s/L 30
 Gel Pa 1000
 Press. kPa 1000
 Pump S.P.M. 1000
 Liner Size mm 1000
 W.L. cm 1000

Day Tour - 08:00 - 16:00
 Hrs. 12
 Density kg/m³ 1080
 Viscosity s/L 30
 Gel Pa 1000
 Press. kPa 1000
 Pump S.P.M. 1000
 Liner Size mm 1000
 W.L. cm 1000

Day Tour - 16:00 - 24:00
 Hrs. 4
 Density kg/m³ 1080
 Viscosity s/L 30
 Gel Pa 1000
 Press. kPa 1000
 Pump S.P.M. 1000
 Liner Size mm 1000
 W.L. cm 1000

REMARKS

0000 0115 1/4
 Rig start & BOP
 Survey
 Daily 222.2 mm hole
 0115 0130 1/4
 0130 0145 1/4
 0145 0200 6 1/4

0500 0500 1
 SERVICE R.O. & B.O.P.
 0715 1445 5 1/2
 1445 1500 1/4
 SECOP OUT
 1500 1600 1

SECOP - 772.50
 BOARD - 772.94
 56

0600 1700 1
 FINISH OUT
 SERVICE R.O. & B.O.P.
 1715 1830 1 1/4
 CLEAN MUD TANKS
 WORK ON WATER SYSTEM
 1830
 BRAKES
 1930 1
 Pick up shock subs & run in
 1930 2115 1 3/4
 Break into clean 14m to 15m
 2115 2145 1/2
 Daily 222.2 mm hole
 2145 2400 2 1/4

Boiler In Use (Yes/No)

Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CALGARY OFFICE COPY

Approved by

M. J. Hemmick

20040

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

[illegible]

Approved:

CALGARY OFFICE COPY

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

2. LOCATION Westward A-62 Little Lake AREA NWT DATE Feb 4/80

Drilling Tour — 00:00 - 08:00

Specify actual hours worked Hrs. 9.54 80 1039 7 50000 30 84625 20 171 71 1737 5.5 3.39 0

From Metres Drilled To Hours On Bottom Force of Drill String dakt Stands Singles No. O.D. I.D. Length DC Force dakt m Up On Kelly

No. Size Type & Jet Size Serial No. Force on Bit dakt R.P.M. m Drilled Hrs. m Reamed Hrs. CONDITION

MUD 00:00 02:00 04:00 06:00 DESILTER SURVEY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061 1062 1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224 1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 1323 1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339 1340 1341 1342 1343 1344 1345 1346 1347 1348 1349 1350 1351 1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431 1432 1433 1434 1435 1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450 1451 1452 1453 1454 1455 1456 1457 1458 1459 1460 1461 1462 1463 1464 1465 1466 1467 1468 1469 1470 1471 1472 1473 1474 1475 1476 1477 1478 1479 1480 1481 1482 1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 1504 1505 1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546 1547 1548 1549 1550 1551 1552 1553 1554 1555 1556 1557 1558 1559 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570 1571 1572 1573 1574 1575 1576 1577 1578 1579 1580 1581 1582 1583 1584 1585 1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1700 1701 1702 1703 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730 1731 1732 1733 1734 1735 1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751 1752 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 25

Hi-Tower Drilling

2 LOCATION

1-1-1- H62 Silt Lake AREA shute DATE Feb 9/90

[illegible]

Pump S.P.M.	Pump 2	55	55	55	55	Variable - 2	"CLEANED SHAKER TANK"
Line Size mm	Pump 1		40	35			
	Pump 2						
W.L.	F.C.	pH					
11.4	1.6	10.					

Day Tour - 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drk String daN	Stands	Singles	DRILL COLLARS				DC Force daN	On Ke
Specify actual hours worked		From	To					No.	O.D. mm	I.D. mm	Length m		
1172		33	1205	5	53000	36	1	20	71	71	17.7	3.39	C
		No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION	

Joe Schedlosky	12	2	222	F2	79.7	79.5	355	3F	13.000	95	433	625
Alvin Pyle	12											
J.C. Adani	12											

12:00

12:00

12:00

14:00

DESILTER

SURVEY

1

Next

1

FUEL

Ken Unruh	12	MUD	08:00	10:00	12:00	14:00	Stop/Start	Hrs.	1205	2	Motor	2	Oil	2	Water	1
Mike Jordan	12	Density kg/m ³	1100	1110	1110	Off	1100 kg/m ³	UF	1110 kg/m ³		Hours	3	Change (Hours)	3		
D. Peters	13	Viscosity cP	44	44	44											
		Gel Pa					Flow Rate	11	L/min.							

[illegible]

W.L.	16	F.C.	16	PH	8.5
Liner Size mm	Pump 1	140	43	81	
	Pump 2				

Evening Tour - 16:00-24:00		From 1205		To 1225		Hours On Bottom 4	Force of Drill String down 5400	Stands 36	Singles 2	DRILL COLLARS				Hrs. 3.39	CONDITION
Specify actual hours worked	Hrs.	Metres	Metres	Metres	Metres	Metres	Metres	Metres	Metres	No. 20	Q.D. mm 171	I.D. mm 77	Length m 115.71		

	No.	Size	Type & Jet Size	Serail No.	Force (psi)	Flow (gpm)	FUEL
B I T S	2	222	F2 7/8-7 1/4	355 5F	7000	95 453 6749	

		DESILTER				SURVEY			
MUD	18:00	18:00	20:00	22:00	Stop/Start	Hrs. 8			
Density kg/m ³	110	115	120	116	OF 110	WF 117			
Viscosity s/L	42	40	43	43	Flow Rate	11			
						L/min.			

Ref	Gei Pa	Pump 1	Additives	Size	Trips	No. Lines	MegaJoules	TOTAL MJ	Slip (m)	Cut	NEXT
haric	Press. kPa	Pump 2									
1	Pump	Pump 1		GENERAL							
				Cleaned Shaker Tanks							

S.P.M.	Pump 2	53	54
Liner Size mm	Pump 1	140	K 381
	Pump 2		
F.C.	pH		

[illegible]

REMARKS	Time		
	Start	Stop	Interval
DOWN	0000	0100	1
SURFACE RIGID BOX	0100	0115	14
DOWN	0115	0530	414
SURFACE	0530	0545	14
DOWN	0545	0500	814
FUEL 4400 GAL			

Boiler in Use	Yes	No
Drill	08:00	08:30 1/2
Rig Service ✓ BoP	08:30	08:45 1/4
Drill	08:45	10:15 1 1/2
Fix Geolgraph line	10:15	10:30 1/4 ✓
Drill	10:30	12:00 1 1/2
Fix Geolgraph line	12:00	12:15 1/4 *
Drill	12:15	13:15 1
Dummy Trip 12 stands out,	13:15	~~13:15~~
+ 14 1/2 circulate bridges (1163m)		15:15 2
Drill	15:15	15:45 1/2
Survey	15:45	16:00 3/4

[illegible]

Ambulance & Medic Start/Stop

Approved by _____

CALGARY OFFICE COPY

Camp Start/Stop

ck Sub Start/Stop

DAILY DRILLING REPORT

DAY WORK RECORD

28993

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

10. LOCATION West Coast MHA Site Lake AREA Alberta DATE Feb 19/80

Drilling Tour — 00:00 - 08:00
Specify actual hours worked Hrs. 12

METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS	m Up On Kelly	
From	To					No.	O.D.	I.D.	Length	DC Force daN	SS	
Metres	Metres						mm	mm	m			
1225	1236	3 1/2	23000	37	—	19	117	71	12.37	3.39	5.5	7
No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION		
2	222	EA 3/4 1/4	30535	2000	95	464	12	33	1/2			
MUD		00:00	02:00	04:00	06:00	DESILTER		SURVEY				
Density kg/m ³		1145	1145	Stop/Start		Hrs.		12		33 1/2		
Viscosity s/L		48	46	OF		kg/m ³ UF		kg/m ³				
Gel Pa				Flow Rate		L/min.						
Press. kPa	Pump 1			Additives		Size		Trips		No. Lines		MegaJoules
Pump 2	6500	6500									TOTAL MJ	
Pump S.P.M.	Pump 1											Slip (m)
Pump 2	54	54									Cut	
Liner Size mm	Pump 1											Next Slip
Pump 2	140 x 381											
W.L. cm	11.5	F.C. mm	1.6	PH		10.5						

Day Tour — 08:00 - 16:00
Specify actual hours worked Hrs. 12

METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS	m Up On Kelly	
From	To					No.	O.D.	I.D.	Length	DC Force daN	SS	
Metres	Metres						mm	mm	m			
1236	1253	3 3/4	53000	38	—	19	117	71	16.82	3.34	5.5	10
No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION		
3	222	J3 3/4 1/4	50699	5000	95	17	38					
MUD		08:00	10:00	12:00	14:00	DESILTER		SURVEY				
Density kg/m ³		1145	1145	Stop/Start		Hrs.		12		33		
Viscosity s/L		43	44	OF		kg/m ³ UF		kg/m ³				
Gel Pa				Flow Rate		L/min.						
Press. kPa	Pump 1			Additives		Size		Trips		No. Lines		MegaJoules
Pump 2	6500	6500									TOTAL MJ	
Pump S.P.M.	Pump 1											Slip (m)
Pump 2	55	55									Cut	
Liner Size mm	Pump 1											Next Slip
Pump 2	140 x 381											
W.L. cm	11.4	F.C. mm	1.6	PH		95						

Evening Tour — 16:00 - 24:00
Specify actual hours worked Hrs. 12

METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS	m Up On Kelly	
From	To					No.	O.D.	I.D.	Length	DC Force daN	SS	
Metres	Metres						mm	mm	m			
1253	1276	6	54000	39	—	19	117	71	16.82	3.39	5.5	5
No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION		
3	222	J3 3/4 1/4	50699	3000	95	40	934					
MUD		16:00	18:00	20:00	22:00	DESILTER		SURVEY				
Density kg/m ³		1140	1145	1150	1150	Stop/Start		Hrs.		1253 20		
Viscosity s/L		40	40	40	40	OF		kg/m ³ UF		kg/m ³		
Gel Pa				Flow Rate		L/min.						
Press. kPa	Pump 1			Additives		Size		Trips		No. Lines		MegaJoules
Pump 2	6500	6500									TOTAL MJ	
Pump S.P.M.	Pump 1											Slip (m)
Pump 2	55	55									Cut	
Liner Size mm	Pump 1											Next Slip
Pump 2	140 x 381											
W.L. cm	11.4	F.C. mm	1.6	PH		9.5						

REMARKS	Time		
	Start	Stop	Interval
Drill	00:00	02:45	2 1/2
Survey	02:45	03:15	1/2
Drill	03:15	03:30	1/4
1/2 Pump	03:30	05:15	1 1/2
Drill	05:15	05:45	1/2
Blow Mud Lines & Trip	05:45	06:15	3/4
For B.T. (Not shown & Calculated)	06:00	06:45	3 1/4
3 1/4			
Boiler In Use (Yes/No)			
Rig Service / B.P.	08:00	09:15	1 1/4
Run Buck in Hole	09:15		
Clean cut 4m of fill	11:00	11:30	2 3/4
fix drawworks oiler	11:30	12:45	1 1/4
Drill	12:45	13:30	3/4
Work on pump no. 1	13:30	16:00	2 1/2
Drill			
3 1/4			
Boiler In Use (Yes/No)			
Rig Service / B.P.	16:00	16:15	1/4
Survey	16:15	16:45	1/2
Work on Pump no. 2	16:45	17:45	1
Drill	17:45	22:45	5
1/2 Pump	22:45	23:00	1/4
Drill	23:00	24:00	1
3 1/4			
Boiler In Use (Yes/No)			

Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Toolpusher

Approved by

CALGARY OFFICE COPY

23000

10. 2 LOCATION WEST COAST ALB. 2 SUR. LAKE AREA N.W. T. DATE FEB 12/80

Drilling Tour - 16:00 - 24:00		Specify actual hours worked		Hrs.	METRES DRILLED		From	Metres	To	Hours On Bottom	Force of Drill String dsh	Stands	Singles	DRILL COLLARS				SS 3/4" ID	SS 1/2" ID	SS 1/4" ID	SS 1/8" ID	SS 1/16" ID	SS 1/32" ID	SS 1/64" ID	SS 1/128" ID	SS 1/256" ID	SS 1/512" ID	SS 1/1024" ID	SS 1/2048" ID	SS 1/4096" ID	SS 1/8192" ID	SS 1/16384" ID	SS 1/32768" ID	SS 1/65536" ID	SS 1/131072" ID	SS 1/262144" ID	SS 1/524288" ID	SS 1/1048576" ID	SS 1/2097152" ID	SS 1/4194304" ID	SS 1/8388608" ID	SS 1/16777216" ID	SS 1/33554432" ID	SS 1/67108864" ID	SS 1/134217728" ID	SS 1/268435456" ID	SS 1/536870912" ID	SS 1/1073741824" ID	SS 1/2147483648" ID	SS 1/4294967296" ID	SS 1/8589934592" ID	SS 1/17179869184" ID	SS 1/34359738368" ID	SS 1/68719476736" ID	SS 1/137438953472" ID	SS 1/274877906944" ID	SS 1/549755813888" ID	SS 1/1099511627776" ID	SS 1/2199023255552" ID	SS 1/4398046511104" ID	SS 1/8796093022208" ID	SS 1/17592186044416" ID	SS 1/35184372088832" ID	SS 1/70368744177664" ID	SS 1/140737488355328" ID	SS 1/281474976710656" ID	SS 1/562949953421312" ID	SS 1/1125899906842624" ID	SS 1/2251799813685248" ID	SS 1/4503599627370496" ID	SS 1/9007199254740992" ID	SS 1/18014398509481984" ID	SS 1/36028797018963968" ID	SS 1/72057594037927936" ID	SS 1/144115188075855872" ID	SS 1/288230376151711744" ID	SS 1/576460752303423488" ID	SS 1/1152921504606846976" ID	SS 1/2305843009213693952" ID	SS 1/4611686018427387904" ID	SS 1/9223372036854775808" ID	SS 1/18446744073709551616" ID	SS 1/36893488147419103232" ID	SS 1/73786976294838206464" ID	SS 1/147573952589676412928" ID	SS 1/295147905179352825856" ID	SS 1/590295810358705651712" ID	SS 1/1180591620717411303424" ID	SS 1/2361183241434822606848" ID	SS 1/4722366482869645213696" ID	SS 1/9444732965739290427392" ID	SS 1/18889465931478580854784" ID	SS 1/37778931862957161709568" ID	SS 1/75557863725914323419136" ID	SS 1/151115727451828646838272" ID	SS 1/302231454903657293676544" ID	SS 1/604462909807314587353088" ID	SS 1/1208925819614629174706176" ID	SS 1/2417851639229258349412352" ID	SS 1/4835703278458516698824704" ID	SS 1/9671406556917033397649408" ID	SS 1/19342813113834066795298816" ID	SS 1/38685626227668133590597632" ID	SS 1/77371252455336267181195264" ID	SS 1/154742504910672534362390528" ID	SS 1/309485009821345068724781056" ID	SS 1/618970019642690137449562112" ID	SS 1/1237940039285380274899124224" ID	SS 1/2475880078570760549798248448" ID	SS 1/4951760157141521099596496896" ID	SS 1/9903520314283042199192993792" ID	SS 1/19807040628566084398385987584" ID	SS 1/39614081257132168796771975168" ID	SS 1/79228162514264337593543950336" ID	SS 1/158456325028528675187087900672" ID	SS 1/316912650057057350374175801344" ID	SS 1/633825300114114700748351602688" ID	SS 1/1267650600228229401496703205376" ID	SS 1/2535301200456458802993406410752" ID	SS 1/5070602400912917605986812821504" ID	SS 1/10141204801825835211973625643008" ID	SS 1/20282409603651670423947251286016" ID	SS 1/40564819207303340847894502572032" ID	SS 1/81129638414606681695789005144064" ID	SS 1/162259276829213363391578010288128" ID	SS 1/324518553658426726783156020576256" ID	SS 1/649037107316853453566312041152512" ID	SS 1/1298074214633706907132624082305024" ID	SS 1/2596148429267413814265248164610048" ID	SS 1/5192296858534827628530496329220096" ID	SS 1/10384593717069655257060992658440192" ID	SS 1/20769187434139310514121985316880384" ID	SS 1/41538374868278621028243970633760768" ID	SS 1/83076749736557242056487941267521536" ID	SS 1/166153499473114484112975882535043072" ID	SS 1/332306998946228968225951765070086144" ID	SS 1/664613997892457936451903530140172288" ID	SS 1/1329227995784915872903807060280344576" ID	SS 1/2658455991569831745807614120560689152" ID	SS 1/5316911983139663491615228241121378304" ID	SS 1/10633823966279326983230456482242756608" ID	SS 1/21267647932558653966460912964485513216" ID	SS 1/42535295865117307932921825928971026432" ID	SS 1/85070
-------------------------------	--	-----------------------------	--	------	----------------	--	------	--------	----	-----------------	---------------------------	--------	---------	---------------	--	--	--	------------	------------	------------	------------	-------------	-------------	-------------	--------------	--------------	--------------	---------------	---------------	---------------	---------------	----------------	----------------	----------------	-----------------	-----------------	-----------------	------------------	------------------	------------------	------------------	-------------------	-------------------	-------------------	--------------------	--------------------	--------------------	---------------------	---------------------	---------------------	---------------------	----------------------	----------------------	----------------------	-----------------------	-----------------------	-----------------------	------------------------	------------------------	------------------------	------------------------	-------------------------	-------------------------	-------------------------	--------------------------	--------------------------	--------------------------	---------------------------	---------------------------	---------------------------	---------------------------	----------------------------	----------------------------	----------------------------	-----------------------------	-----------------------------	-----------------------------	------------------------------	------------------------------	------------------------------	------------------------------	-------------------------------	-------------------------------	-------------------------------	--------------------------------	--------------------------------	--------------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------------	----------------------------------	----------------------------------	----------------------------------	-----------------------------------	-----------------------------------	-----------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------	-------------------------------------	-------------------------------------	-------------------------------------	--------------------------------------	--------------------------------------	--------------------------------------	---------------------------------------	---------------------------------------	---------------------------------------	---------------------------------------	--	--	--	---	---	---	--	--	--	---	---	---	---	--	--	--	---	---	---	--	--	--	--	---	---	---	--	--	--	---	---	---	------------

REMARKS	Time		
	Start	Stop	Interval
Drill	0000	0145	1 1/4
Service Rig w/o P.	0145	0200	1/4
Drill	0200	0615	4 1/4
Survey	0615	0645	1/2
Drill	0645	0800	1 1/4
8			
Boiler In Use ☒ Yes ☐ No			
Drill	08:00	08:45	3/4
Rig Service ✓ w/o P.	08:45	09:00	1/4
Drill	09:00	11:00	2
w/o pump	11:00	11:15	1/4
Drill	11:15	14:00	2 3/4
Survey	14:00	14:30	1/2
Drill	14:30	16:00	1 1/2
3 1/4			
Boiler In Use ☒ Yes ☐ No			
Rig Service	16:00	16:15	1/4
Thaw out Hoist clutch	16:15	16:45	1/2
Blow out mud line +	16:45		
Trip for bit		2400	7 1/4
8			
Boiler In Use ☒ Yes ☐ No			

CALGARY OFFICE COPY

• **Tookouche**

Approved

DAILY DRILLING REPORT

DAY WORK RECORD

20101

NOTE -- Please show metres drilled while "Control Drilling" as well as HOURS.

O. 2 LOCATION West Coast - 400 Sur Lane AREA SLT DATE Feb 12/80

Drilling Tour -- 00:00 - 06:00
Specify actual hours worked

METRES DRILLED		Hours On Bottom		Force of Drill String down		Stands		Singles		DRILL COLLARS		DC Force down		m Up On Kelly	
From	To	Metres	Bottom	Force	Stands	Singles	No.	O.D.	I.D.	Length	DC Force	Stands	m Up	On Kelly	
1119	1437	19	7	64000	14	2	19	171	71	16.82	55	3.39	3		
No.		Size	Type & Jet Size	Serial No.	Force on Bit	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION				
4		222	J33	74.5	520.74	10000	76	19	7						
MUD		00:00	02:00	04:00	06:00	DESILTER		SURVEY		1		Next		FUEL	
Density kg/m ³		1150	1150	1150	1150	Stop/Start		Hrs.		1		Next		Litres	
Viscosity cP		45	45	45	45	Flow Rate		L/min.		2		Next		WATER	
Gel Pa						Flow Rate		L/min.		3		Next		m ³	
Pressure		Pump 1				Additives		Size		Trips		No. Lines		Megajoules	
Pump 2		4000	4000	4000	4000	Gel - 12		GENERAL		TOTAL MJ		Slip (m)		Cut	
Pump 3		55	55	55	55	YPC-1		CLEANED SHAKER TANK							
Pump 4		55	55	55	55	CMC-2									
Liner Size		Pump 1													
Pump 2		140 x 381													
W.L.		Pump 3													
cm ³		10.2	F.C.	1.6	PH	10									

Drilling Tour -- 06:00 - 16:00
Specify actual hours worked

METRES DRILLED		Hours On Bottom		Force of Drill String down		Stands		Singles		DRILL COLLARS		DC Force down		m Up On Kelly	
From	To	Metres	Bottom	Force	Stands	Singles	No.	O.D.	I.D.	Length	DC Force	Stands	m Up	On Kelly	
1437	1468	31	634	45	2	2	19	171	71	16.82	55	3.39	0		
No.		Size	Type & Jet Size	Serial No.	Force on Bit	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION				
4		222	J33	74.5	520.74	10000	76	50	13						
MUD		06:00	10:00	12:00	14:00	DESILTER		SURVEY		1		Next		FUEL	
Density kg/m ³		1155	1120	1120	1120	Stop/Start		Hrs.		1		Next		Litres	
Viscosity cP		42	40	50	45	Flow Rate		L/min.		2		Next		WATER	
Gel Pa						Flow Rate		L/min.		3		Next		m ³	
Pressure		Pump 1				Additives		Size		Trips		No. Lines		Megajoules	
Pump 2		4000	4000	4000	4000	Gel - 12		GENERAL		TOTAL MJ		Slip (m)		Cut	
Pump 3		55	55	55	55	YPC-1		CLEANED SHAKER TANK							
Pump 4		55	55	55	55	CMC-2		Held Blow out Drill							
Liner Size		Pump 1													
Pump 2		140 x 381													
W.L.		Pump 3													
cm ³		10.2	F.C.	1.6	PH	10									

Drilling Tour -- 16:00 - 24:00
Specify actual hours worked

METRES DRILLED		Hours On Bottom		Force of Drill String down		Stands		Singles		DRILL COLLARS		DC Force down		m Up On Kelly	
From	To	Metres	Bottom	Force	Stands	Singles	No.	O.D.	I.D.	Length	DC Force	Stands	m Up	On Kelly	
1468	1494	26	714	64000	46	2	19	171	71	16.82	55	3.39	3		
No.		Size	Type & Jet Size	Serial No.	Force on Bit	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION				
4		222	J33	74.5	520.74	10000	76	21							
MUD		16:00	18:00	20:00	22:00	DESILTER		SURVEY		1		Next		FUEL	
Density kg/m ³		110	110	1120	1120	Stop/Start		Hrs.		1		Next		Litres	
Viscosity cP		42	40	43	42	Flow Rate		L/min.		2		Next		WATER	
Gel Pa						Flow Rate		L/min.		3		Next		m ³	
Pressure		Pump 1				Additives		Size		Trips		No. Lines		Megajoules	
Pump 2		4000	4000	4000	4000	Gel - 26		GENERAL		TOTAL MJ		Slip (m)		Cut	
Pump 3		55	55	55	55	YPC-1		CLEANED SHAKER TANK							
Pump 4		55	55	55	55	CMC-1									
Liner Size		Pump 1													
Pump 2		140 x 381													
W.L.		Pump 3													
cm ³		1.6	F.C.	1.6	PH	10									

REMARKS	Time		
	Start	Stop	Interval
FINISH IN	0800	0815	1/4
SECURE RIG BOP	0815	0830	1/4
BRACE LINE & CURTAIN	0830	0845	1/4
DRILL	0845	0900	1/4
Drill	0900	0930	1/2
Rig Service + BOP	0930	0945	1/4
son. check	0945	1000	1/2
Drill	1000	1100	2
Rewind yardline + Survey	1100	1245	3/4
Drill	1245	1300	4 1/4
Drill	1300	1315	1/4
Rig Service + BOP	1315	1330	1/4
Drill	1330	1345	1/4
SURVEY	1345	1400	1/2
Drill	1400	1415	1/4

Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Toolpusher

Approved by

CALGARY OFFICE COPY

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION West Coast - Mt. S. Lake AREA S. 1.1 T DATE Feb 15/80

Morning Tour - 00:00 - 08:00		METRES DRILLED										DRILL COLLARS										m Up On Kelly							
Specify actual hours worked		From		Metres		To		Hours On Bottom		Force of Drill String daN		Stands		Singles		No.		O.D. mm		I.D. mm		Length m		DC Force daN		SS RMR STB CB JR		m Up On Kelly	
Hrs.		1536		16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3	
Driller	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Derrick	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19		171		71		166.92		5.5		3.39		3			
Floor	1536	16		1552		7 1/2		65000		48		2		19															

14-0442

Shock Sub Start/Stop

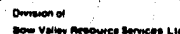
Camp Start/Stop

Ambulance & Medic Start/Stop

Toolpusher

Approved by _____

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)



DAILY DRILLING REPORT

DAY WORK RECORD

28904

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS

RIG NO. 2 LOCATION Westcoast G-62 Silt Lake AREA N.W.T. DATE Feb. 16/80

Morning Tour — 00:00 - 08:00		METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Ke				
Specify actual hours worked	Hrs.	From	Metres	To						No.	O.D. mm	I.D. mm	Length m	DC Force daN					
Driller Joe Schedlosky	12	1583	19	1602	7 1/4	66000	50	2	19	171	71	166.92		SS 3.39	5				
Derrick Alvin Pyle	12	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION							
Floor J.C. Adani	12	4	222	I33 3/16 1/4 3	52074	15000	70	184	72										
Floor Mike Jordan	12	MUD				00:00	02:00	04:00	06:00	DESILTER				SURVEY		1		Next 1	FUEL
Floor Bill Macir	12	Density kg/m³	1100	1100	1100	1100	Stop/Start	Hrs.	1600	1 1/2	Motor Hours	2	Oil	2	Litre				
Motor Ken Thucub	12	Viscosity s/L	44	46	45	46	OF 1/16 kg/m³	UF 1/16 kg/m³			3	Change (Hours)	3	WATER					
Mechanic		Gel Pa					Flow Rate	15	L/min.	L.P.									
Extra		Press. kPa	Pump 1				Additives	Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip				
Injuries:		Pump 2	3500	3500	3500	3500	Gel = 14												
		Pump S.P.M.	Pump 1				YPC = 2	GENERAL											
		Liner Size mm	Pump 2	55	55	55	55	C.M.C. = 2	Hold Flow out Drill										
		W.L. cm	Pump 1				Soda Ash = 1	Changed Shaker Screen to 80A											
		F.C. mm	Pump 2	140	X	381	Caustic = 1	Cleaned Shaker Tank											
		pH																	
Day Tour — 08:00 - 16:00		METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS <td>SS RMR STB CB JR</td> <td>m Up On Ke</td>				SS RMR STB CB JR	m Up On Ke				
Specify actual hours worked	Hrs.	From	Metres	To						No.	O.D. mm	I.D. mm	Length m	DC Force daN					
Driller Gary Jassy	16	1602	21	1623	7 3/4	66000	51	1	19	171	71	166.92		SS 3.39	5				
Derrick Mark Baskin	12	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION							
Floor Gary Gossel	16	4	222	I33 2/16 1/4 3	52074	1715000	70	205	79 3/4										
Floor P. Tr. Brock	16	MUD				08:00	10:00	12:00	14:00	DESILTER				SURVEY		1		Next 1	FUEL
Floor Wayne Adams	16	Density kg/m³	110	110	110	110	Stop/Start	Hrs.			Motor Hours	2	Oil	2	Litre				
Motor Larry Bulleya	16	Viscosity s/L	48	42	40	41	OF 1/16 kg/m³	UF 1/16 kg/m³			3	Change (Hours)	3	WATER					
Mechanic		Gel Pa					Flow Rate	20	L/min.	L.P.									
Extra		Press. kPa	Pump 1				Additives	Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip				
Injuries:		Pump 2	2500	2500	2500	2500	Gel = 10												
		Pump S.P.M.	Pump 1				YPC = 1	GENERAL											
		Liner Size mm	Pump 2	55	55	55	55	VELTEX = 2	HEAD B.O.D. Drill										
		W.L. cm	Pump 1				C.M.C. = 1	Put on 100A S screen											
		F.C. mm	Pump 2	140	X	381													
		pH																	
Evening Tour — 16:00 - 24:00		METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS <td>SS RMR STB CB JR</td> <td>m Up On Ke</td>				SS RMR STB CB JR	m Up On Ke				
Specify actual hours worked	Hrs.	From	Metres	To						No.	O.D. mm	I.D. mm	Length m	DC Force daN					
Driller		1623	20	1643	7 1/2	67000	52		19	171	71	166		SS 3.39	4				
Derrick		No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION							
Floor		4	222	I33 2/16 1/4 3	52074	15000	70	225	97 1/4										
Floor		MUD				16:00	18:00	20:00	22:00	DESILTER				SURVEY		1		Next 1	FUEL
Floor		Density kg/m³	110	110	110	110	Stop/Start	Hrs.	1628	1 1/2	Motor Hours	2	Oil	2	Litre				
Motor		Viscosity s/L	42	44	45	47	OF 1/16 kg/m³	UF 1/16 kg/m³			3	Change (Hours)	3	WATER					
Mechanic		Gel Pa					Flow Rate	15	L/min.	L.P.									
Extra		Press. kPa	Pump 1				Additives	Size											

REMARKS	Time		
	Start	Stop	Interval
Drill	00:00	03:00	3
Rig Service BoP / well for flow	03:00	03:15	1/4
Drill	03:15	07:00	3 3/4
Survey	07:00	07:30	1/2
Drill	07:30	09:00	1 1/2
Boiler In Use ☒ Yes / No			
Drill 922mm Hole	0800	1415	6 1/4
✓ Flow Rig Ser & BOPS	1415	1430	1/4
Drill	1430	16:00	1 1/2
Boiler In Use ☒ Yes / No			
Drill	16:00	18:00	2
Survey & ✓ Flow Rig Ser	18:00	1830	1/2
Drill	1830	24:00	5 1/2
Boiler In Use ☒ Yes / No			

14-G442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic/Start/Stop

Toolbox

Approved

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

RIG NO. 2 LOCATION Westcoast G-62 Silt Lake AREA N.W.T. DATE Feb. 17/80

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

Morning Tour — 00:00 - 08:00		DATE: 11/11/92													
Specify actual hours worked	Hrs.	METRES DRILLED			Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS					SS RMR STD CB JR	m Up On Kell
		From	Metres	To					No.	O.D. mm	I.D. mm	Length m	DC Force daN		
Driller Joe Schedlosky	12	1666	23	1666	7 3/4	67000	52	2	19	171	71	166.93		S.S. 3.34	0
Derrick Alvin Pyle	12	B	No. 4	Size 222	Type & Jet Size T33 3/4 - 1/4	Serial No. 52074	Force on Bit daN 17000	R.P.M. 70	m Drilled 248	Hrs. 95	m Reamed	Hrs.	CONDITION		
Floor J.C. Adani	12	I													
Floor Mike Jordan	12	S													
Floor Bill Macier	12	MUD				DESILTER		SURVEY		Motor Hours		Next Oil Change (Hours)		FUEL 16110 Litres	
Motor Ken Urruh	12	Density kg/m³	1110	1110	110	110	Stop/Start	Hrs.			1	1			
Mechanic		Viscosity s/L	46	43	42	47	05100 kg/m³	Up 170 kg/m³			2	2			
Extra		Gel Pa					Flow Rate	15 L/min.			3	3			
Injuries:		Press. kPa	Pump 1				Additives		Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut
			Pump 2	1500	3500	2500	3500	GE-10							
		Pump S.P.M.	Pump 1					120 - 1	GENERAL						
			Pump 2	55	55	55	55	MC-1	Held Brown out Drill						
		Liner Size mm	Pump 1												
			Pump 2	140	X	381									
		W.L. cm³	9.6												
		F.C. mm	1.6												
		pH	10.5												

[illegible]

Day Tour — 08:00 - 16:00		METRES DRILLED										DRILL COLLARS										SS RMR STB SJR		m m On Keil	
Specify actual hours worked	Hrs.	From	Metres	To	Hours On Bottom	Force of Drill String daN	Stands	Singles	No.	O.D. mm	I.D. mm	Length m	DC Force daN	CONDITION											
Driller Gary Jossy	12	16160	15	1681	5 1/4	68 000	53	1	19	171	71	16682		SS. 239		3									
Derrick Mark Backus	12	B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	42 I												
Floor Garry Westel	12	I	4	222	333 2/4 = 1/43	52274	151/2000	45/20	963	100/14															
Floor P-Te Back	12	S																							
Floor Wayne Adams	12	MUD		08:00	10:00	12:00	14:00	DESILTER		SURVEY		1		Next 1		FUEL									
Motor Lenny Bulley	12	Density kg/m³		1090	1110	1120	1100	Stop/Start		Hrs.	16160	13/4	2		Oil 2		Litres								
Mechanic		Viscosity s/L		412	414	414	412	OF kg/m²		UF kg/m²	Motor Hours		3		Change (Hours) 3		WATER								
		Gel Pa						Flow Rate		L/min.	L.P.				L.P.		m³								
		Press. kPa	Pump 1					Additives			Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut								
			Pump 2	3500	3500	3500	3500										Next Slip								
		Pump S.P.M.	Pump 1								GENERAL		HELD 20' Drill												
			Pump 2	55	55	55	55																		
		Liner Size mm	Pump 1																						
			Pump 2	140	381																				
		W.L. cm	9.6	F.C. mm	1.6	pH	10.																		

Boiler In Use	(Yes)/No			
Drill		0800	0815	1/4
✓ Flow & Rig SER & ✓ POP		0815	0830	1/4
Survey		0830	0845	1/4
Drill		0845	1030	1 3/4
THAW POTTY TABLE AIRLINE'S		1030	1045	1/4
Drill		1045	1400	3 1/4
~~HOSE~~ ~~OUT~~ #4 CIRC U (Earp)		1400	1430	1/2
Blow Kelly & Deep To Top		1430	1500	1/2
HOSI T BIT #4 & STRAP OUT		1500	1600	1

[illegible][illegible]

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Toolpusher

Approved by _____

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION Westcast C-62 Sitt Lake AREA N.W.T. DATE Feb 19/80

Morning Tour — 00:00 - 08:00		METRES DRILLED										DRILL COLLARS										SS RMR STD CB JR		m Up On Kelly	
Specify actual hours worked	Hrs.	From	Metres	To	Hours On Bottom	Force of Drill String daN	Stands	Singles	No.	O.D. mm	I.D. mm	Length m	DC Force daN	CONDITION											
Driller Joe Schedlosky	12	1681	24	1709	6 1/4	64000	54	1	19	171	71	166.82		S.S. 3.39		4									
Derrick Alvin Pyle	12	B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.													
Floor J.C. Adani	12	I	5	222	J33 3/4" - 1/4"	51622	157000	220	6 1/4																
Floor Mike Jordan	12	S																							
Floor Bill Maier	12	MUD				00:00	02:00	04:00	06:00	DESILTER				SURVEY		Next 1		FUEL							
Motor Ken Unruh	12	Density kg/m³				1105	1105	1105	Stop/Start 1 Hrs.				Motor Hours		Oil Change 2		16100 litres								
Mechanic		Viscosity s/L				55	58	59	Density kg/m³ 1105				Flow Rate 15 L/min.		L.P.		WATER								
Extra		Gel Pa				Additives				Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip								
Injuries:		Press. kPa	Pump 1	600 - 15				GENERAL																	
		Pump 2	1 PC - 2																						
		Pump 1	55 55 55				Held Blow out Drill																		
		Pump 2	140 x 38																						
		Liner Size mm	Pump 1	Count - 1																					
		Pump 2																							
		W.L. cm³	F.C. mm	pH																					
		80	1.6	10																					

REMARKS	Time		
	Start	Stop	Interval
circulate out bridges	00:00	00:30	½
Fresh running in The Hold Drill	00:35	01:30	1
Pump down P.O.P / anti / well Fl.	01:30	02:00	¼ h
Drill	02:00	02:15	¼
	02:15	08:45	5 ¾
3500 GAL FUEL			
Boiler In Use Yes No			

Day Tour — 08:00 - 16:00

Specify actual hours worked	Hrs.
-----------------------------	------

	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION
Derrick	109	98	1721	714	69000	55	1	19	171	71	66-57
Derrick	Mat Backer	12	5 222	5-23 2/5	1/113	51622	15000	55	56	13 1/2	
Floor	Garry Gertel	12									
Floor	Pete Back	12	MUD	08:00	10:00	12:00	14:00	DESILTER	SURVEY		
Floor	Wayne Adams	12	Density kg/m³	110	1100	1090	1080	Stop/Start	Hrs.	1722	1 1/2°
Motor	Leroy Bailey	12	Viscosity s/L	43	44	48	50	DP 0.90 g/m³	UF 1.20 g/m³		
Mechanic			Gel Pa					Flow Rate	15 L/min.		
Extra			Press. kPa	Pump 1	9100	3500	260	350	Additives	Size	Trips
Injuries:				Pump 2						No. Lines	Megajoules
				Pump 1	55	55	55	55	GEL - 60	TOTAL MJ	Slip (m)
				Pump 2					VPC - 6	Cut	Next Slip
				Liner Size mm	140 x 381				CAUSTIC - 2		
				W.L. cm³	88	F.C. mm	1.6	pH	10		

GENERAL CREW HELD BOP DRILL REPLACED PUMP IN #1 PUMP BUILD PREFIX

Drill	0800	1015	2 1/4
Repair Pop Valve #1 pump	1015	1030	1/4
Drill	1030	1145	1 1/4
✓ Flow R.G. Sec 9 / B.O.P'S	1145	1200	1/4
Survey	1200	1215	1/4
Drill	1215	1600	3 3/4

Boiler In Use ☒ Yes ☐ No

Evening Tour — 16:00 - 24:00

Specify actual hours worked	Hrs
-----------------------------	-----

[illegible][illegible]

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Tooipusher

Approved by: _____

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)



DAILY DRILLING REPORT

DAY WORK RECORD

28907

RIG NO. 2 LOCATION Westcoast G-62 Siltlake AREA N.W.T. DATE Feb 19/80

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

Morning Tour — 00:00 - 08:00		METRES DRILLED										DRILL COLLARS										REMARKS		Time								
Specify actual hours worked		From		Metres		To		Hours On Bottom		Force of Drill String daN		Stands		Singles		No.		O.D. mm		I.D. mm		Length m		DC Force daN		SS RMR STB CB JR		m Up On Kelly		Start	Stop	Interval
Hrs.		No.		Size		Type & Jet Size		Serial No.		Force on Bit daN		R.P.M.		m Drilled		Hrs.		m Reamed		Hrs.		CONDITION										
Driller	Joe Schedlaky	12	1768	24	1784	73	70000	57	1	19	171	71	166.82	8.39	8																	
Derrick	Alvin Pyle	12	5	222	J33	3/4	5/16	22	16000	60	108	79																				
Floor	J.C. Adani	12																														
Floor	Mike Jordan	12																														
Floor	Bill Maier	12																														
Motor	Ken Unruh	12																														
Mechanic																																
Extra																																
Injuries:																																
Day Tour — 08:00 - 16:00		METRES DRILLED										DRILL COLLARS										REMARKS		Time								
Specify actual hours worked		From		Metres		To		Hours On Bottom		Force of Drill String daN		Stands		Singles		No.		O.D. mm		I.D. mm		Length m		DC Force daN		SS RMR STB CB JR		m Up On Kelly		Start	Stop	Interval
Hrs.		No.		Size		Type & Jet Size		Serial No.		Force on Bit daN		R.P.M.		m Drilled		Hrs.		m Reamed		Hrs.		CONDITION										
Driller	GARY JESSY	12	1789	180	1804	6 1/2	71000	57	2	19	171	71	166.82	8.39	3																	
Derrick	Mark Backus	12	5	222	1-33	3/4	5/16	22	17000	59	108	79																				
Floor	GARY JESSY	12																														
Floor	R. T. Back	12																														
Floor	W. A. Adams	12																														
Motor	LENNY BULLLEY	12																														
Mechanic																																
Extra																																
Injuries:																																
Evening Tour — 16:00 - 24:00		METRES DRILLED										DRILL COLLARS										REMARKS		Time								
Specify actual hours worked		From		Metres		To		Hours On Bottom		Force of Drill String daN		Stands		Singles		No.		O.D. mm		I.D. mm		Length m		DC Force daN		SS RMR STB CB JR		m Up On Kelly		Start	Stop	Interval
Hrs.		No.		Size		Type & Jet Size		Serial No.		Force on Bit daN		R.P.M.		m Drilled		Hrs.		m Reamed		Hrs.		CONDITION										
Driller			1804	13	1817	7	71000	58	1	19	171	71	166.82	8.39	8																	
Derrick			5	222	1-33	3/4	5/16	22	17000	60	136	47																				
Floor																																
Floor																																
Floor																																
Motor																																
Mechanic																																
Extra																																
Injuries:																																

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Toolpusher

Approved by

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

RIG NO. 2 LOCATION Westcoast G-62 Silt Lake

Morning Tour — 00:00 - 08:00		METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	
Specify actual hours worked	Hrs.	From	Metres	To					
Driller <u>Joe Schedlosky</u>	12	1817	18	1835		7 1/2	12000	58	
Derrick <u>Alvin Pyle</u>	12	B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN		
Floor <u>J.C. Adani</u>	12	I	5	222	J 33 3/4 x 1/4	51622	17000		
Floor <u>Mike Jordan</u>	12	S							
Floor <u>Bill Maier</u>	12	MUD				00:00	02:00	04:00	06:00
Motor <u>Ken Unruh</u>	12	Density kg/m ³				1095	1090	1020	1075
Mechanic		Viscosity s/L				62	65	60	55
Extra		Gel Pa							
Injuries:		Press. kPa				Pump 1	3900	3700	
		Pump 2							
		Pump S.P.M.				Pump 1	55	55	
		Pump 2							
		Liner Size mm				Pump 1	140	381	
		Pump 2							
		W.L. cm				9.8	F.C. mm	1.6	pH
Day Tour — 08:00 - 16:00		METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	
Specify actual hours worked	Hrs.	From	Metres	To					
Driller <u>Gary Toss</u>	12	1835	19	1854		7 3/4	12000	59	
Derrick <u>Mark Baskin</u>	12	B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN		
Floor <u>Gary Gershel</u>	12	I	5	222	J 33 3/4 x 1/4	51622	17000		
Floor <u>D. Te. Dock</u>	12	S							
Floor <u>W. Adams</u>	12	MUD				08:00	10:00	12:00	14:00
Motor <u>W. Adams</u>	12	Density kg/m ³				1050	1070	1080	1020
Mechanic <u>W. Adams</u>	12	Viscosity s/L				62	75	65	60
Extra		Gel Pa							
Injuries:		Press. kPa				Pump 1			
		Pump 2							
		Pump S.P.M.				Pump 1	5000	5700	5000
		Pump 2							
		Liner Size mm				Pump 1	55	55	55
		Pump 2							
		W.L. cm				9.6	F.C. mm	1.6	pH
Evening Tour — 16:00 - 24:00		METRES DRILLED				Hours On Bottom	Force of Drill String daN	Stands	
Specify actual hours worked	Hrs.	From	Metres	To					
Driller		1854	16	1970		7 1/2	12000	60	
Derrick		B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN		
Floor		I	5	222	J 33 3/4 x 1/4	51622	17000		
Floor		S							
Floor		MUD				16:00	18:00	20:00	22:00
Floor		Density kg/m ³				1080	1090	1080	1085
Motor		Viscosity s/L				55	55	60	60
Mechanic		Gel Pa							
Extra		Press. kPa				Pump 1			
Injuries:		Pump 2							
		Pump S.P.M.				Pump 1	5000	5700	5000
		Pump 2							
		Liner Size mm				Pump 1	55	55	55
		Pump 2							
		W.L. cm				9.8	F.C. mm	1.6	pH

14-0442

Shock Sht Start/Stop

Camp Start/Stop

LOG REPORT

DAY WORK RECORD

28908

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

AREA N.W.T. DATE Feb 20/80

Singles		DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly
No.	O.D. mm	I.D. mm	Length m	DC Force daN			
2	19	171	71	16682	SS	339	0
R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION		
164	50						

SURVEY		Motor Hours		Next Oil Change (Hours)		FUEL Litres	
1		1		1		1	
2		2		2		2	
3		3		3		3	
L.P.		L.P.		L.P.		L.P.	

Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip

GENERAL

Change Shaker Screen
Hold Blow out Drill

Singles		DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly
No.	O.D. mm	I.D. mm	Length m	DC Force daN			
1	19	171	71	16682	SS	339	0
R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION		
183	5734						

SURVEY		Motor Hours		Next Oil Change (Hours)		FUEL Litres	
1		1		1		1	
2		2		2		2	
3		3		3		3	
L.P.		L.P.		L.P.		L.P.	

Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip

GENERAL

Crew Hold BOP Drill

Singles		DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly
No.	O.D. mm	I.D. mm	Length m	DC Force daN			
1	19	171	71	16682	SS	339	3
R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION		
199	65						

SURVEY		Motor Hours		Next Oil Change (Hours)		FUEL Litres	
1		1		1		1	
2		2		2		2	
3		3		3		3	
L.P.		L.P.		L.P.		L.P.	

Size	Trips	No. Lines	Megajoules	TOTAL MJ	Slip (m)	Cut	Next Slip

GENERAL

REMARKS	Time		
	Start	Stop	Interval
Drill	00:00	02:15	2 1/4
change pump with -	02:15	02:30	1/4
Drill	02:30	04:10	1 3/4
Rig Serv BOP L-W-11 Flow	04:10	04:15	1/4
Drill	04:15	09:00	4 3/4
Drill	08:00	12:15	4 1/4
Flow Rig serv & 1300'S	12:15	12:20	1/4
Drill	12:20	16:00	3 1/2
Drill	16:00	16:15	1/4
Rig Serv BOP 1/2 well Flow	16:15	16:30	1/4
Drill	16:30	22:30	6
Thru cut air lines on drawwork	22:30	22:45	1/4
Drill	22:45	24:00	1 1/4

Boiler In Use ☒ Yes ☐ No

Toolpusher John S. [Signature]

Approved by D. V. [Signature]

Ambulance & Medic ☒ Start ☐ Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)



DAILY DRILLING REPORT

DAY WORK RECORD

28910

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION Westcoast G-62 Silt Lake AREA N.W.T. DATE Feb 22/90

Morning Tour — 00:00 - 08:00		Specify actual hours worked		Hrs.	METRES DRILLED		From	Metres	To	Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	
Driller	Joe Schedlosky	2												No.	O.D. mm	I.D. mm	Length m	DC Force daN	55	6
Derrick	Alvin Pyle	6																	7.34	
Floor	J.C. Adams	8																		
Floor	Mike Jordan	4																		
Floor																				
Floor																				
Motor	Ken Horvath	4																		
Mechanic																				
Extra																				
Injuries:																				

REMARKS	Time		
	Start	Stop	Interval
	Rig Serv, BOP + Flow ✓		
Tip To Log			4 1/4
Log			3 1/4
Boiler In Use (Yes/No)			

Day Tour — 08:00 - 16:00		Specify actual hours worked		Hrs.	METRES DRILLED		From	Metres	To	Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	
Driller	Gary Jessy	8												No.	O.D. mm	I.D. mm	Length m	DC Force daN		
Derrick	Mark Baskin	8																		
Floor	Gary Gossel	8																		
Floor	P.T. Beck	8																		
Floor	Wayne Adams	8																		
Motor	Wayne Bolley	8																		
Mechanic																				
Extra																				
Injuries:																				

REMARKS	Time		
	Start	Stop	Interval
	Rig Service + BOP's		
Logging w/ Schlumberger	0800	0815	1/4
Rig out same	0815	1500	6 3/4
Make up BOP Run DC's	1500	1515	1/4
Oil change #1 pump	1515	1600	3/4
Change Packing #1 pump			
Boiler In Use Yes/No			

Evening Tour — 16:00 - 24:00		Specify actual hours worked		Hrs.	METRES DRILLED		From	Metres	To	Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	
Driller	Ken McIntosh	4												No.	O.D. mm	I.D. mm	Length m	DC Force daN	61	9
Derrick	Wayne McIntosh	4																		
Floor																				
Floor	Ken Reid	4																		
Floor	Brian French	4																		
Motor	Brian French	4																		
Mechanic																				
Extra																				
Injuries:																				

REMARKS	Time		
	Start	Stop	Interval
	Service Rig + BOP		
Log down 7' BOP	1600	1615	1/4
Rig in	1615	1715	1
Circ w. B.O.	1715	2100	3 3/4
	2100	2400	3
Boiler In Use Yes/No			

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolpusher

Approved by



DAILY DRILLING REPORT

DAY WORK RECORD

28911

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. <u>2</u> LOCATION <u>WEST-COAST G-62-SILT LAKE</u> AREA <u>NWT</u> DATE <u>FEB 23/80</u>	
Morning Tour — 00:00 - 08:00	
Specify actual hours worked	Hrs. <u>15.77</u>
Driller <u>GARRY W SAWAK</u>	8
Derrick <u>MARK BASKIN</u>	8
Floor <u>GARRY GERSTEL</u>	8
Floor <u>PETE BOCK</u>	8
Floor <u>WAYNE ADAMS</u>	8
Motor <u>LEROY BULLLEY</u>	8
Mechanic	
Extra	
Injuries: <u>PLEASE HOLD GARRY W SAWAK'S CHEQUES IN FORT ST JOHN OFFICE FOR PICK UP</u>	
Day Tour — 08:00 - 16:00	
Specify actual hours worked	Hrs. <u>15.77</u>
Driller <u>KEVIN MILTON</u>	12
Derrick <u>LENN MITCHELL</u>	12
Floor <u>KEVIN REID</u>	12
Floor <u>ALAN FRISCH</u>	12
Motor <u>RYAN TULLER</u>	12
Mechanic	
Extra	
Injuries:	
Evening Tour — 16:00 - 24:00	
Specify actual hours worked	Hrs. <u>4</u>
Driller <u>GARRY W SAWAK</u>	4
Derrick <u>MARK BASKIN</u>	4
Floor <u>GARRY GERSTEL</u>	4
Floor <u>WAYNE ADAMS</u>	4
Floor <u>PETE BOCK</u>	4
Motor <u>LEROY BULLLEY</u>	4
Mechanic	
Extra	
Injuries:	

REMARKS	Time		
	Start	Stop	Interval
RIG SERV - BOP'S	00:00	00:15	1/4
WAIT ON ORDERS - CIRC	00:15	08:00	7 3/4
Run up / Submergence			
495m - 1877m			
Compensated W. Temperature			
1450m to 1877m			
495 - 1877m			
Boiler In Use <u>(Yes/No)</u>			
CIRC W/O ORDERS	08:00	10:30	2 1/2
Run up / Submergence			
1030 1445 4 1/4			
MAKE UP DST #1	1445	1600	1 1/4
Boiler In Use <u>(Yes/No)</u>			
MAKE UP DST #1	1600	1745	1 3/4
Run up / Submergence			
1745 2130 3 3/4			
HEAD UP DST #1 & TEST	2130	2400	2 1/2
Boiler In Use <u>(Yes/No)</u>			

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medical Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolpusher

Approved by



DAILY DRILLING REPORT

DAY WORK RECORD

28912

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION WEST COAST - G-12 SALT LAKEAREA NWT DATE FEB 24/80

Morning Tour — 00:00 - 08:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN	
Driller	GARRY W. SAWAK 8	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION	
Derrick	MARK BASKIN 8												
Floor	GARRY GERSTEL 8												
Floor	WAYNE ADAMS 8												
Floor	PETE BOCK 8												
Motor	LEROY BULLLEY 8												
Mechanic													
Extra													
Injuries:													
Day Tour — 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN	
Driller	RON A. LUTSEN 12	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION	
Derrick	WAYNE ADAMS 12												
Floor													
Floor	KEVIN RYAN 12												
Floor	RON A. LUTSEN 12												
Motor	LEROY BULLLEY 12												
Mechanic													
Extra													
Injuries:													
Evening Tour — 16:00 - 24:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN	
Driller	GARRY W. SAWAK 4	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION	
Derrick	MARK BASKIN 4												
Floor	GARRY GERSTEL 4												
Floor	WAYNE ADAMS 4												
Floor	PETE BOCK 4												
Motor	LEROY BULLLEY 4												
Mechanic													
Extra													
Injuries:													

REMARKS	Time		
	Start	Stop	Interval
TESTING DST #1	00:00	03:10	3 1/2
PULL PACKERS FREE & BREAK OFF HOLE	03:30	04:00	1/2
PULL DST #1 (CHAIN OUT)	04:00	08:00	4
FLUID @ 22 STOS OF PIPE			
DST #1 16.10 m - 16.27 m Keg River			
P. Flow 30 min 1.5-1.6 FE 60 FS 1-120			
No line to surface			
Recovered 60 m 1.1 line 1.1			
75m O.D. blocked - cut 11m			
502 m 1.1 line 1.1			
15m 1.1 line 1.1			
Boiler In Use ☒ Yes ☐ No			
PULL DST #1	08:00	09:15	1 1/4
RECOVER RECORDERS	09:15		
4 1/2 DEGRS		13:20	3 1/4
CRANE DOWN & LOAD OUT	13:30		
TEST TOOLS		14:45	2 1/4
RUN IN PIPE CANNERS	14:45		
1 DAY DOWN CANNERS		16:00	1 1/4
Boiler In Use ☒ Yes ☐ No			
SEPARATE PIPE & ROP	16:00	16:15	1/4
LOT DOWN DOWN CANNERS	16:15	17:45	1 1/2
PULL IN PIPE ROP MEN END	17:45	20:45	3
PICK UP DP OFF RACKS & RUN IN	20:45	21:45	1
CIRC & COND. HOLE	21:45	22:40	2 1/4
Boiler In Use ☒ Yes ☐ No			

14-0442

Toolpusher

Approved by

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

DAILY DRILLING REPORT

DAY WORK RECORD

28913

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION G-12-SILT LAKE AREA NWT DATE 2/15/80

Morning Tour — 00:00 - 08:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	REMARKS	Start	Time Stop	Interval	
Specify actual hours worked	Hrs.	From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN						
Driller <u>GARRY W SAWAK</u>	<u>8</u>					<u>66</u>	<u>1</u>											
Derrick <u>MARK BASKIN</u>	<u>8</u>																	
Floor <u>GARRY GERSTEL</u>	<u>5</u>																	
Floor <u>WAYNE ADAMS</u>	<u>8</u>																	
Floor <u>PETE BOCK</u>	<u>8</u>																	
Motor <u>LEROY BULLLEY</u>	<u>8</u>																	
Mechanic																		
Extra																		
Injuries:																		
Day Tour — 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	Boiler In Use	Yes/No			
Specify actual hours worked	Hrs.	From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN						
Driller <u>Ray McLaughlin</u>	<u>12</u>																	
Derrick <u>Wayne Macdonald</u>	<u>12</u>																	
Floor <u>Wayne Macdonald</u>	<u>12</u>																	
Floor <u>Wayne Macdonald</u>	<u>12</u>																	
Floor <u>Wayne Macdonald</u>	<u>12</u>																	
Motor <u>Raymond Turner</u>	<u>12</u>																	
Mechanic																		
Extra																		
Injuries:																		
Evening Tour — 16:00 - 24:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	Boiler In Use	Yes/No			
Specify actual hours worked	Hrs.	From	Metres To					No.	O.D. mm	I.D. mm	Length m	DC Force daN						
Driller <u>GARRY W SAWAK</u>	<u>4</u>																	
Derrick <u>MARK BASKIN</u>	<u>4</u>																	
Floor <u>GARRY GERSTEL</u>	<u>4</u>																	
Floor <u>WAYNE ADAMS</u>	<u>4</u>																	
Floor <u>PETE BOCK</u>	<u>4</u>																	
Motor <u>LEROY BULLLEY</u>	<u>4</u>																	
Mechanic																		
Extra																		
Injuries:																		

14-0442

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Toolpusher

Approved by

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)



DAILY DRILLING REPORT

DAY WORK RECORD

28914

RIG NO. 2 LOCATION C-67-SILT LAKE

AREA NWT DATE Feb 26/80

NOTE - Please show metres drilled while "Control Drilling" as well as HOURS.

Morning Tour - 00:00 - 08:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	REMARKS			Time		
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN				Start	Stop	Interval	
Driller	GARRY W SAWAK 8	B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick	MARK BASKIN 8	I																	
Floor	GARRY GERTSEL 8	T																	
Floor	WAYNE ADAMS 8	S																	
Floor	PETE BUCK 8																		
Motor	LEROY BULLY 8																		
Mechanic																			
Extra																			
Injuries	PETE BUCK GOT HIT IN LEG WHEN PIPE SLID OFF CATWALK																		
Day Tour - 08:00 - 16:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	REMARKS			Time		
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN							
Driller	BOB MCINTOSH 12	B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick	WAYNE ADAMS 12	I																	
Floor		T																	
Floor	KEITH FELD 12	S																	
Floor	BOB MCINTOSH 12																		
Motor	LEROY BULLY 12																		
Mechanic																			
Extra	CARRY GERTSEL 3																		
Injuries																			
Evening Tour - 16:00 - 24:00		METRES DRILLED		Hours On Bottom	Force of Drill String daN	Stands	Singles	DRILL COLLARS				SS RMR STB CB JR	m Up On Kelly	REMARKS			Time		
Specify actual hours worked		From	Metres	To				No.	O.D. mm	I.D. mm	Length m	DC Force daN							
Driller	GARRY W SAWAK 4	B	No.	Size	Type & Jet Size	Serial No.	Force on Bit daN	R.P.M.	m Drilled	Hrs.	m Reamed	Hrs.	CONDITION						
Derrick	MARK BASKIN 4	I																	
Floor	GARRY GERTSEL 4	T																	
Floor	WAYNE ADAMS 4	S																	
Floor																			
Motor	LEROY BULLY 4																		
Mechanic																			
Extra																			
Injuries																			

14-0412

Shock Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

Toolput

NOTE — Please show metres drilled while "Control Drilling" as well as HOURS.

RIG NO. 2 LOCATION WEST COAST G-62-SILT LAKE AREA NWT DATE Feb. 27/80

Morning Tour — 00:00 - 08:00		Hrs.																	m Up On Kelly		
Specify actual hours worked																					
Driller	BARRY W SAWAK		8																		
Derrick	MARK BASHIN		8																		
Floor	GARRY GERTSEL		8																		
Floor	WAYNE ADAMS		8																		
Floor																					
Motor	LEROY BULLCY		8																		
Mechanic																					
Extra																					
Injuries:																					
Day Tour — 08:00 - 16:00		Hrs.																	m Up On Kelly		
Specify actual hours worked																					
Driller																					
Derrick																					
Floor																					
Floor																					
Floor																					
Motor																					
Mechanic																					
Extra																					
Injuries:																					
Evening Tour — 16:00 - 24:00		Hrs.																	m Up On Kelly		
Specify actual hours worked																					
Driller																					
Derrick																					
Floor																					
Floor																					
Floor																					
Motor																					
Mechanic																					
Extra																					
Injuries:																					

14-0442

Toolpusher

Sneck Sub Start/Stop

Camp Start/Stop

Ambulance & Medic Start/Stop

Approved by _____

CONSERVATION BOARD COPY (MAIL TO CALGARY OFFICE)

WELL NAME <i>West Coast #62</i>				CONTRACTOR <i>H. J. Jones</i>		HOLE FILLING DATA	
DRILL PIPE SIZE <i>114</i> m	DISPLACEMENT <i>62.50</i> kg/m	DATE AND TIME <i>Feb 24/80-0400</i>					
DRILL COLLAR LENGTH <i>106.11</i> m	M.O.D. <i>158</i> mm I.D. <i>71</i> mm	DISPLACEMENT <i>Wet .0108</i> m ³ /m	DEPTH <i>1687</i> m				
TOTAL DISPLACEMENT: <i>18.91</i> m ³	THEORETICAL <i>18.91</i> m ³	ACTUAL <i>19.06</i> m ³	RIG NO. <i>2</i>				

NOTE: IT TAKES APPROXIMATELY 3 TIMES AS MUCH MUD FOR A WET TRIP OR D.S.T.

AVERAGE LENGTH OF STAND

ALL ENTRIES MUST BE ACCUMULATED

NO. STANDS IN DERRICK	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³	NO. STANDS IN DERRICK	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³
<i>5</i>	<i>1.53</i>	<i>1.55</i>			
<i>10</i>	<i>1.53</i>	<i>1.54</i>			
<i>15</i>	<i>1.53</i>	<i>1.56</i>			
<i>20</i>	<i>1.53</i>	<i>1.52</i>			
<i>25</i>	<i>1.53</i>	<i>1.54</i>			
<i>30</i>	<i>1.53</i>	<i>1.53</i>			
<i>35</i>	<i>1.53</i>	<i>1.53</i>			
<i>40</i>	<i>1.53</i>	<i>1.52</i>			
<i>45</i>	<i>1.53</i>	<i>1.54</i>			
<i>50</i>	<i>1.53</i>	<i>1.52</i>			
<i>55</i>	<i>1.53</i>	<i>1.51</i>			
			TOTALS ▶		
FILL HOLE BEFORE PULLING DRILL COLLARS					
NO. STANDS DRILL COLLARS	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³			
<i>1</i>	<i>.52</i>	<i>.55</i>			
<i>2</i>	<i>.52</i>	<i>.54</i>			
<i>3</i>	<i>.52</i>	<i>.57</i>			
<i>4</i>	<i>.52</i>	<i>.51</i>			
	<i>2.08</i>	<i>2.11</i>			
			TOTALS ▶		

CALCULATED DISPLACEMENT

DRILL PIPE	AVERAGE LENGTH m	DISPLACEMENT			
		DRY m ³ /m	WET m ³ /m	DRY m ³	WET m ³
SINGLE					
DOUBLE					
TRIPLE (STAND)	<i>28.50</i>	<i>.0034</i>	<i>.0108</i>		
DRILL COLLAR	<i>26.50</i>	<i>.0156</i>	<i>.0198</i>		
SINGLE					
DOUBLE					
TRIPLE (STAND)					

TO CONVERT m³ DISPLACEMENT FROM TRIP TANK TO cm

DISPLACEMENT FROM SAME TANK = $\frac{\text{TOTAL DISPLACEMENT OF STRING}}{\text{VOLUME OF TRIP TANK m}^3/100}$ = m³/m = cm

REASON FOR TRIP

Pull D.S.T. #1

DRILLER

[Signature]

REGULATION 31.5 (c) REQUIRES THAT THIS RECORD BE RETAINED AND SUBMITTED AS PART OF THE DAILY DRILLING REPORT (ORIGINAL COPY)

OPERATOR'S REPRESENTATIVE

WELL NAME				CONTRACTOR		HOLE FILLING DATA	
WELL NAME		H62		CONTRACTOR		Hi Tower	
DRILL PIPE SIZE	114 mm	DISPLACEMENT	0.032 m ³ /m	DATE AND TIME		Feb 13/80	
DRILL COLLAR LENGTH	106-11	M.O.D.	158 mm I.D.	DISPLACEMENT	0.0156 m ³ /m	DEPTH	1977 m
TOTAL DISPLACEMENT	THEORETICAL	7.3 m ³	ACTUAL	7.82 m ³	RIG NO.	2	
NOTE: IT TAKES APPROXIMATELY 3 TIMES AS MUCH MUD FOR A WET TRIP OR D.S.T.						AVERAGE LENGTH OF STAND	

ALL ENTRIES MUST BE ACCUMULATED

NO. STANDS IN DERRICK	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³	NO. STANDS IN DERRICK	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³
5	.46	.95			
10	.46	.47			
15	.46	.47			
20	.46	.45			
25	.46	.46			
30	.46	.45			
35	.46	.47			
40	.46	.46			
45	.46	.47			
50	.46	.46			
55	.46	.45			
60	.46	.46			
62	.18	.20			
2	.06	.05			
	5.76	6.27			
			TOTALS		
FILL HOLE BEFORE PULLING DRILL COLLARS					
NO. STANDS DRILL COLLARS	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³			
1	.386	.390			
2	.386	.390			
3	.386	.388			
4	.386	.390			
	1.54	1.55			
			TOTALS		

CALCULATED DISPLACEMENT

DRILL PIPE	AVERAGE LENGTH m	DISPLACEMENT			
		DRY m ³ /m	WET m ³ /m	DRY m ³	WET m ³
SINGLE					
DOUBLE					
TRIPLE (STAND)	25.50	.0034	.0108		
DRILL COLLAR	26.50	.0156	.0198		
INGLE					
DOUBLE					
TRIPLE (STAND)					

TO CONVERT m³ DISPLACEMENT FROM TRIP TANK TO cm

$$\text{DISPLACEMENT FROM SAME TANK} = \frac{\text{TOTAL DISPLACEMENT OF STRING}}{\text{VOLUME OF TRIP TANK m}^3/100} = \text{m}^3/\text{m} = \text{cm}$$

REASON FOR TRIP

to test

DRILLER

[Signature]

REGULATION 31.5 (c) REQUIRES THAT THIS RECORD BE RETAINED AND SUBMITTED AS PART OF THE DAILY DRILLING REPORT (ORIGINAL COPY).

OPERATOR'S REPRESENTATIVE

Westcoast G-62 silt Lake N.W.T. CONTRACT

WELL NAME

CONTRACTOR

HOLE FILLING DATA

TRACTOR Hi Tower Rig #2

DRILL PIPE SIZE 1 1/4 m 24.70 kg/m		DISPLACEMENT -0034 m ³ /m		DATE AND TIME Feb. 21/80 / 2300 hrs	
DRILL COLLAR LENGTH M.O.D. 158 mm I.D. 73 mm		DISPLACEMENT .0156 m ³ /m		DEPTH 1885 m	
TOTAL DISPLACEMENT: THEORETICAL 4.643 m ³		ACTUAL 3.709 m ³		RIG NO. 2	

NOTE: IT TAKES APPROXIMATELY 3 TIMES AS MUCH MUD FOR A WET TRIP OR D.S.T.

AVERAGE LENGTH OF STAND

28.50

ALL ENTRIES MUST BE ACCUMULATED

ALL ENTRIES MUST BE ACCUMULATED					
NO. STANDS IN DERRICK	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³	NO. STANDS IN DERRICK	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³
5	.484	.49			
10	.484	.49			
15	.484	.49			
20	.484	.49			
25	.484	.49			
30	.484	.50			
35	.484	.49			
40	.484	.49			
45	.484	.47			
50	.484	.48			
55	.484	.49			
60	.484	.50			
			TOTALS ▶		
~~Single~~			FILL HOLE BEFORE PULLING DRILL COLLARS		
			NO. STANDS DRILL COLLARS	3 CALCULATED VOLUME m ³	? ACTUAL VOLUME m ³
			1	.444	.446
			2	.444	.445
			3	.444	.444
			4	.444	.445
			5	.444	.444
			6	.444	.445
			Single	.140	.160
				2.804	2.824
			TOTALS ▶		

CALCULATED DISPLACEMENT

DRILL PIPE	AVERAGE LENGTH m	DISPLACEMENT			
		DRY m ³ /m	WET m ³ /m	DRY m ³	WET m ³
SINGLE					
DOUBLE					
TRIPLE (STAND)	28.50	.0034	.0108	.0969	.3079
DRILL COLLAR					
SINGLE					
DOUBLE					
TRIPLE (STAND)	28.50	.0156	.0198	.4446	.5642

TO CONVERT m³ DISPLACEMENT FROM TRIP TANK TO cm

$$\text{DISPLACEMENT FROM SAME TANK} = \frac{\text{TOTAL DISPLACEMENT OF STRING}}{\text{VOLUME OF TRIP TANK m}^3/100} = \text{m}^3/\text{m} = \text{cm}$$

REASON FOR TRIP

► To Log Hole

DRILLER

Top Sheetlock

REGULATION 31.5 (C) REQUIRES THAT THIS RECORD BE
RETAINED AND SUBMITTED AS PART OF THE DAILY
DRILLING REPORT (ORIGINAL COPY)

OPERATOR'S
REPRESENTATIVE

WEST Coast G-62 SILTLAKE HWT

WELL NAME

HOLE FILLING DATA

CONTRACTOR
HI TOWER

DRILL PIPE SIZE m 114	DISPLACEMENT kg/m .0032	DATE AND TIME Feb 17 / 80
DRILL COLLAR LENGTH m 166.85	DISPLACEMENT mm 0.138	DEPTH m 1681
M.Q.D. mm I.D.	THEORETICAL m³ 7.35	RIG NO. 2
TOTAL DISPLACEMENT: m³	ACTUAL m³ 7.56	AVERAGE LENGTH OF STAND m 28.50

NOTE: IT TAKES APPROXIMATELY 3 TIMES AS MUCH MUD FOR A WET TRIP OR D.S.T.

ALL ENTRIES MUST BE ACCUMULATED

NO. STANDS IN DERRICK	CALCULATED VOLUME m³	ACTUAL VOLUME m³	NO. STANDS IN DERRICK	CALCULATED VOLUME m³	ACTUAL VOLUME m³
5	.46	.48			
10	.46	.49			
15	.46	.48			
20	.46	.47			
25	.46	.47			
30	.46	.48			
35	.46	.47			
40	.46	.48			
45	.46	.48			
50	.46	.48			
53	.46	.48			
	<u>.218</u>	<u>.23</u>			
	4.91	5.11			
			TOTALS ▶		
FILL HOLE BEFORE PULLING DRILL COLLARS					
NO. STANDS DRILL COLLARS	CALCULATED VOLUME m³	ACTUAL VOLUME m³			
DRILL	.256	.258			
1.	.386	.388			
2	.386	.389			
3	.386	.386			
4	.386	.387			
5	.386	.387			
DRILL	.256	.260			
	<u>.244</u>	<u>.245</u>			
			TOTALS ▶		

CALCULATED DISPLACEMENT

DRILL PIPE	AVERAGE LENGTH m	DISPLACEMENT			
		DRY m³/m	WET m³/m	DRY m³	WET m³
SINGLE					
DOUBLE					
TRIPLE (STAND)	28.50	.0032	.0103	.092	.294
DRILL COLLAR					
SINGLE					
DOUBLE					
TRIPLE (STAND)					

TO CONVERT m³ DISPLACEMENT FROM TRIP TANK TO cm
 DISPLACEMENT FROM SAME TANK = $\frac{\text{TOTAL DISPLACEMENT OF STRING}}{\text{VOLUME OF TRIP TANK m}^3/100}$ = m³/m = cm

REASON FOR TRIP:

▶ Trip for BIT 44

DRILLER *Gary Gary*

REGULATION 31.5 (C) REQUIRES THAT THIS RECORD BE
 RETAINED AND SUBMITTED AS PART OF THE DAILY
 DRILLING REPORT (ORIGINAL COPY)

OPERATOR'S
 REPRESENTATIVE

WELL NAME				CONTRACTOR		HOLE FILLING DATA	
westcoast G-62 Silt Lake N.W. To				H ₁ Tower Rig#2			
DRILL PIPE SIZE		DISPLACEMENT		DATE AND TIME			
1 1/4 m		kg/m .0032		m ³ /m		Feb. 11, 80	
DRILL COLLAR LENGTH		DISPLACEMENT		DEPTH			
166.82		mm I.D. 71 mm		m ³ /m .0136		1347 m	
TOTAL DISPLACEMENT:		THEORETICAL		ACTUAL		RIG NO.	
2.28 m ³				2.56 m ³		2	
NOTE: IT TAKES APPROXIMATELY 3 TIMES AS MUCH MUD FOR A WET TRIP OR D.S.T.						AVERAGE LENGTH OF STAND	
						28.50 m	

AVERAGE LENGTH OF STAND

[illegible]

CALCULATED DISPLACEMENT		DISPLACEMENT			
DRILL PIPE	AVERAGE LENGTH m	- DRY m³/m	WET m³/m	DRY m³	WET m³
SINGLE					
DOUBLE					
TRIPLE (STAND)	28.50	.0032	.0103	.092	.294
DRILL COLLAR					
INGLE					
DOUBLE					
TRIPLE (STAND)					

REASON FOR TRIP

REASON FOR TRIP

► Recover sandline + survey barrel DRILLER Toe Schedlosty

REGULATION 31.5 (c) REQUIRES THAT THIS RECORD BE
RETAINED AND SUBMITTED AS PART OF THE DAILY
DRILLING REPORT (ORIGINAL COPY)

OPERATOR'S
REPRESENTATIVE

WELL NAME West Coast 5 1462

CONTRACTOR H. J. Jones Rig 2

HOLE FILLING DATA

DRILL PIPE SIZE <u>114</u> m	DISPLACEMENT <u>1.0032</u> m ³ /m	DATE AND TIME <u>Feb 10/80</u>
DRILL COLLAR LENGTH <u>175.21</u> M.O.D. <u>158</u> mm I.D. <u>71</u> mm	DISPLACEMENT <u>1.0136</u> m ³ /m	DEPTH <u>1236</u> m
TOTAL DISPLACEMENT: THEORETICAL <u>5.97</u> m ³	ACTUAL <u>6.05</u> m ³	RIG NO. <u>2</u>

NOTE: IT TAKES APPROXIMATELY 3 TIMES AS MUCH MUD FOR A WET TRIP OR D.S.T.

AVERAGE LENGTH OF STAND 28.50 m

ALL ENTRIES MUST BE ACCUMULATED

NO. STANDS IN DERRICK	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³	NO. STANDS IN DERRICK	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³
5	.46	.49			
10	.46	.49			
15	.46	.46			
20	.46	.47			
25	.46	.45			
30	.46	.45			
35	.46	.46			
37	.18	.20			
<u>3.40</u>		<u>3.47</u>			
			TOTALS ▶		
FILL HOLE BEFORE PULLING DRILL COLLARS					
NO. STANDS DRILL COLLARS	CALCULATED VOLUME m ³	ACTUAL VOLUME m ³			
1	.386	.388			
2	.386	.390			
3	.386	.385			
4	.386	.385			
5	.386	.388			
6	.386	.386			
Double	.257	.260			
			TOTALS ▶		
			<u>2.57</u>		<u>2.58</u>

CALCULATED DISPLACEMENT

DRILL PIPE	AVERAGE LENGTH m	DISPLACEMENT			
		DRY m ³ /m	WET m ³ /m	DRY m ³	WET m ³
SINGLE					
DOUBLE					
TRIPLE (STAND)	<u>28.50</u>	<u>1.0032</u>	<u>1.0103</u>	<u>.092</u>	<u>.294</u>
DRILL COLLAR					
SINGLE					
DOUBLE					
TRIPLE (STAND)					

TO CONVERT m³ DISPLACEMENT FROM TRIP TANK TO cm
 DISPLACEMENT FROM SAME TANK = $\frac{\text{TOTAL DISPLACEMENT OF STRING}}{\text{VOLUME OF TRIP TANK m}^3/100}$ = m³/m = cm

REASON FOR TRIP For RST

REGULATION 31.5 (c) REQUIRES THAT THIS RECORD BE
 RETAINED AND SUBMITTED AS PART OF THE DAILY
 DRILLING REPORT (ORIGINAL COPY)

DRILLER B. J. Jones

OPERATOR'S REPRESENTATIVE