

CANADA SOUTHERN CELIBETA W-39

Drilling Authority No. 630
Date Issued 12 March 1970

WELL NAME Canada Southern Oilbore N-39
FIELD
LOCATION: Unit N Area Section 39 Grid 60-10-122-30
Latitude 60-08-50 Longitude 122-26-50
U.W.L.R. 60.1472 122.4289
U.W.L. 3008196010122300

Rig Release Date

Seismic

Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
12/3/70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
1/4/70	Application to Amend a Well Completion Authority.
	Application to Alter Condition of a Well.
20/6/70	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Date for Back Pressure Test on Natural Gas Wells - Monograph 7 Method.
	Date for Back Pressure Test on Natural Gas Wells - Vitter's Method.
	M.P.R. - Oil - Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale..... Small scale.....

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

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

Location: Unit N Section 29 Grid 60° 10' 122° 30'
Latitude 60° 08' 50" N Longitude 122° 36' 50" W
Unique well identifier 300N294010122300
Universal Well Location Reference Lat. 60.14722° N; Long. 122.61389° W

CASES REPORTED

GEOL. CAL. TOP.

CONFIDENTIAL

LOG RECORD

SERVICING RECORD (Cementing, etc.)

Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
15/3/70	997	700	100 Sacks plus 24 CaCl ₂ Felt at 695 feet.								
20/3/70	Surface Plug		5 sacks of cement. Welded on steel plate with 5 foot riser with top plate indicating the location of the well.								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.L. Mins.	F.S.L. Mins.	P.S.I.R.H.P.	F.S.I.R.H.P.	L.P.R.H.P.	F.F.R.H.P.	L.H.P.	F.R.P.	REMARKS
		NO TESTS RUN												

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
E70-5857	Water	756'	825'	Swab Test	

PRESENT STATUS OF WELL

Oil		Controlled		Company	
Gas		Controlled		Set by	
Dry		Yes		Title	
Susp.				Date	

Canada Southern Petroleum Ltd.

Chief Geologist

June 30, 1970

Forms to be prepared in duplicate and forwarded to the Oil Conservation Engineer, Calgary, Alberta.



File No.
Drilling Authority No. 430

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well or Suspend Drilling

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to abandon, to suspend drilling. —

Name and number of well **Canada Southern Calibeta H-39**

Location: Unit **H** Section **39** Grid **60° 10' 122° 30'**
Latitude **60° 00' 50" N** Longitude **122° 36' 50" W**

From Established Reference Mark:

Universal Well Location Reference **Lat. 60.147 22° N Long. 122.61369° W**

Permit No. **H/A**

Lease No. **572 - R - 60**

Canada Southern Petroleum Ltd.
Dome Petroleum Company Ltd. and Pan American
Petroleum Corporation

Date of commencement of proposed program

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at **Nil**

Gas at **Nil**

Water at **Nil** See Attachment "A"

Total Depth **997**

Date of last operations **March 21, 1970**

Present condition of well

Abandoned.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Net At	Sacks of Cement and Additives	Amount Pulled
1. 7	20	756	756	300 sacks of Construction	Nil
2.				cement plus 2% CaCl₂	
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Log	Plug	Geologic Formation	Number of Sacks of Cement	Remarks
1	997 - 700	Permian & Mississippian	100	Felt at 695'
2	Surface Plug.	Weld on plate and install identification marker.		

The following logs have been run **IES and MEC-SGRC**

Other operations proposed **none**

Operations to be carried out by **Tri City Drilling Ltd.** Contractor Licence No. **675**

Address **Edmonton Engineering Ltd.** Address

Responsible Agent in field **Edmonton Engineering Ltd.**

Dated at **Calgary**, this **14th** Day of **March**, 19 **70**

Signed by **M. A. [Signature]** Company **Canada Southern Petroleum Ltd.**

Title **Chief Geologist** Operator's Exploratory Licence No. **1279**

Note:—The Oil Conservation Engineer's office must be notified before work is commenced.

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thomas
on the 20th March 1970

Dated **1st April**, 19 **70**

[Signature]
Oil Conservation Engineer

Forms to be submitted in triplicate to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.

CANADA SOUTHERN CELLULOSE N-29

SWAB REPORT

3/18/70

DEPTH: 825'

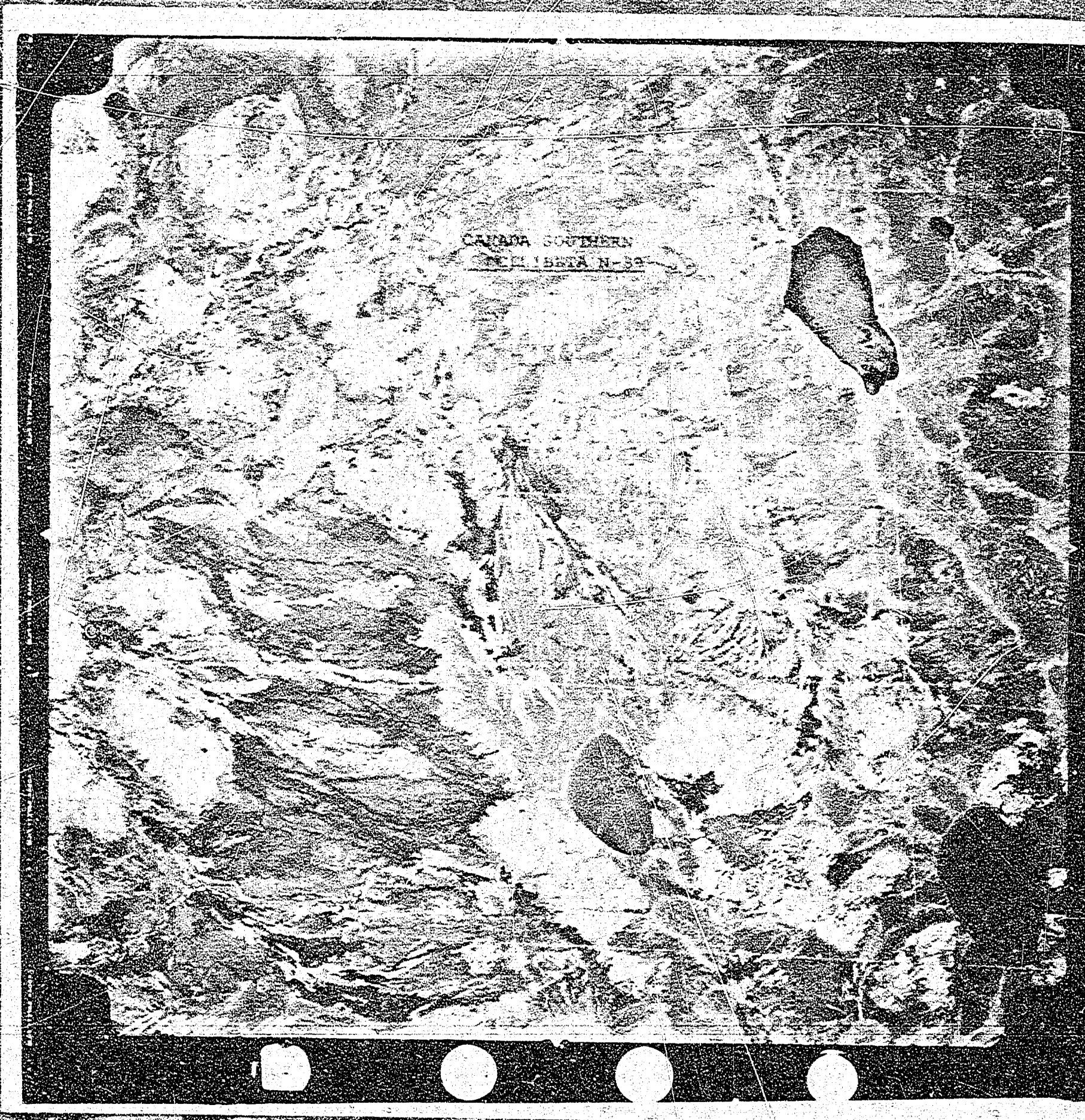
FORMATION: PERMIAN

EST. VOLUME/BBLs.	SWAB NO.	TYPE FLUID	FLUID DEPTH
3	1	Drill Water	Surface
3	2	Drill Water	400'
3	3	Drill Water	400'
3	4	Drill Water	400'
3	5	Drill Water	400'
3	6	Drill Water	400'
3	7	Drill Water	400'
3	8	Drill Water	400'
3	9	Drill Water	400'
3	10	Drill Water	400'
3	11	Drill Water	400'
3	12	Formation Water	400'
3	13	Formation Water	400'
3	14	Formation Water	400'
3	15	Formation Water	400'
3	16	Formation Water	400'
3	17	Formation Water	400'
3	18	Formation Water	400'
3	19	Formation Water	400'
3	20	Formation Water	400'

Total - 6 Bbls.: 20 Swabs: App. 30-35 Bbls. Drill Water
 25-30 Bbls. Formation Water

Formation Water Titrates Fresh

CORRADA SONTAERO
CERRADA 21-31-60



CANADA SOUTHERN
CALIFORNIA N-52

Drilling Authority No. 430

Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority

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: **Canada Southern Celibeta N-39**
 Location: Unit **S** Section **39** Grid **60°10' 122°30'**
 Latitude **60° 08' 50" N.** Longitude **122° 36' 50" W.**
 Unique Well Identifier **JOHNSON/01/22900**
 Universal Well Location Reference **Lat. 60.14722° N., Long. 122.61389° W.**
 Elevation: Ground **K.B.** feet above sea-level
 Well is expected to produce from **Mississippian** formation at a depth
 of about **1,000** feet. Expected total final depth **1,200**
 Area assigned to well **(See Oil Conservation Engineer's note only)**

Permit No. **N/A** Lease No. **572-R-69** Acreage **1594**
 Permittee, licensee, or lessee **Canada Southern Petroleum Ltd.**
 Exploratory License No. **1279** **Dome Petroleum Limited - 1279**
 Surface owned by Crown or **Crown** **Pan American Petroleum Corporation - 1231**
 (If applicant submit name and address of owner and lessee.)
 Petroleum and natural-gas rights owned by **Crown**

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

Casing Size I.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Series of Casing
7	20	Grade H or better	New	850	To Surface
1.					
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment: **Permian, Mississippian**
8" 600 Series Hybrid
600 Series Double Gate Shaffer

Well will be drilled with Rotary Rig No. **3** by **Tri-City Drilling**
 (Drilling Contractor or company)

Responsible agent of applicant: **Edison Engineering Ltd.** Contractor's business License No. **675**
 At well: **Canada Southern Pet.** At registered office: **Canada Southern Petroleum Ltd.**
 Address: **727-7th AVE SW, CALGARY 2, Alberta** Address: **305 - 8 Avenue, S.W., Calgary 2, Alta**

It is understood that if changes become necessary, notice of the change of plan will be submitted.

Dated at **Calgary, Alberta**, this **10th** day of **March**, 1970

Signed by: **M. G. Ashton** Company: **Canada Southern Petroleum Ltd.**
 Title: **Chief Geologist** Operator's License No. **1279**

(For Oil and Mineral Division use only)

APPROVED

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

- The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.
- During well drilling and testing operations, every effort shall be made to ensure

Dated **12th March**, 1970 Please see over page

Oil Conservation Engineer

Forms to be submitted to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.

LAND 52-90-1 (3-69)

*To be supplied when survey plats are available. , or other acceptable reference.

that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

3. We draw to your attention Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
4. Production casing string is to be approved by the Oil Conservation Engineer.

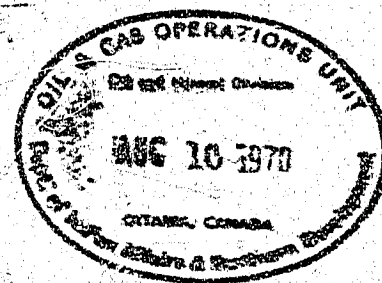
B.H.J. Thomas

B.H.J. Thomas, Oil Conservation Engineer

Canada Southern Petroleum Ltd.

352-11-4-11

CANADA SOUTHERN CELIBETA N-39



Helton Engineering Ltd.
Calgary, Alberta

Helton Engineering Ltd.

CONSULTING PETROLEUM ENGINEERS AND GEOLOGISTS

1280 GARDENERS HOUSE

727 - 7TH AVENUE S.W.

CALGARY 2, ALBERTA

April 24, 1970

Canadian Southern Petroleum Ltd.
305 - 8th Ave. S.E.
Calgary 2, Alberta

Dear Sirs:

Re: WELL LOGGING REPORT 1-11

Enclosed herewith is a summary of all the pertinent drilling and geological details for the subject well.

The well, which was spudded at 7:10 P.M., March 13, 1970, was drilled primarily as a test of the formation and Mississippi. The Pecanier Valley was also tested and produced fresh water.

Results of the electrical logs and samples indicated that there were no zones which warranted testing and the well was subsequently plugged and abandoned. The rig was released at 6:00 P.M., March 20, 1970.

Helton geological supervision was performed by Mr. R. G. Hays of Helton Engineering Ltd., and the rig work was supervised by Mr. J. Carter of Helton Engineering Ltd., under the direction of Mr. H. A. Hays of Canadian Southern Petroleum Ltd. Helton Engineering Ltd. also provided the administrative and operational supervision for this well.

Thank you for the opportunity of serving your company.

Yours very truly,

HELTON ENGINEERING LTD.

R. J. Russell
R. J. Russell, P. Eng.

WJL/AT

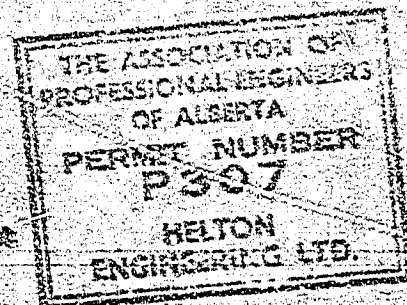


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Schlumberger Borehole Compensated Sonic Log (Pocket)

CANADA SOUTHERN CELIBETA N-39

WELL HISTORY REPORT

Section I - Summary of Well Data

- (a) Well Name and Number -
Canada Southern Celibeta N-39
- (b) Name of Permittee -
Amoco Canada Petroleum Company Ltd.
Canada Southern Petroleum Ltd.
Dome Petroleum Limited
- (c) Operator -
Canada Southern Petroleum Ltd.
Fifth Floor - 505 Eighth Avenue S.W.
Calgary 2, Alberta
- (d) Location -
N-39-50-10-122-30
Lat. 60° 08' 50" N, Long. 122° 36' 50" W
Universal Well Reference
Lat. 50.14722° N; Long. 122.61389° W
- (e) Co-ordinates -
No other development wells in the area.
- (f) Lease Number -
572-R-69
- (g) Drilling Contractor -
Tri-City Drilling Ltd.
Rig #3 - Rotary Rig
- (h) Drilling Authority
430 - Issued March 12, 1970
- (i) Classification - Wildcat
- (j) Elevations -
Ground 1490.0 feet
K.B. 1498.2 feet

CANADA SOUTHERN OILBETA N-19

WELL HISTORY REPORT Continued

- (k) Spud Date -
7:30 P.M., March 15, 1970
- (l) Completed Drilling -
March 19, 1970
- (m) Total Depth -
997 feet Driller
1003 feet Logger
- (n) Well Status -
Plugged and abandoned
- (o) Rig Release Date -
6:00 P.M., March 20, 1970
- (p) Hole Sizes -
9-7/8" to 764 feet
6-1/4" to 997 feet
- (q) Casing -
Ran 18 joints of 7", 20#, H Casing.
(Total of 755.62 feet). Landed casing
at 755.62 feet and cemented with 300
sacks of Construction cement plus 2% CaCl₂.

Section IV - Log Data

<u>Date</u>	<u>Interval</u>	<u>Type of Log</u>
March 19/70	1002 - 756	Induction Electrical Survey
March 19/70	1001 - 756	Borehole Compensated Sonic Gamma Ray Caliper

WELL DATA SUMMARY Continued

Page - 3

Drilling Contractor: Tri-City Drilling Ltd., Rig No. 3

Ben Huber, Toolpusher

Wellsite Geological Supervisor: M. G. Engen

Additional Information:

Swabbed the Permian formation at 825'. Pulled 20 swabs -
Recovered approximately 60 bbls. fluid. Estimated 30 barrels
formation fluid. All fresh water.

Became stuck in hole, differentially, at a total depth of 997'.
Free point calculated at 850'. Spotted 5 bbls. of diesel with
20 gals. of Be-Free. Waited 15 minutes and pulled string free
with 15,000 lbs.

WELTON ENGINEERING LTD. DRILLING PROGRAM

Project: Canada Southern Railway Co. Ltd.
 Location: Canada Southern Railway Co. Ltd.
 Date: 1968
 Drilled by: WELTON ENGINEERING LTD.
 Drilled on: 1968
 Drilled at: Canada Southern Railway Co. Ltd.
 Drilled for: Drilling
 Drilled to: Drilling
 Drilled by: WELTON ENGINEERING LTD.
 Drilled on: 1968
 Drilled at: Canada Southern Railway Co. Ltd.
 Drilled for: Drilling
 Drilled to: Drilling

FORMATION	DEPTH AND ELEVATION	FORMATION	DEPTH AND ELEVATION
Permian Limestone	500 - 594		
Permian Sand	500 - 594		
Permian Limestone	500 - 594		
Total Depth	1130 - 594		

Testing - If possible testing will be done by swabbing the porous zones.

Coring - If oil is recovered upon swab testing a porous zone, then coring ahead will be contemplated.

PREL. COPIES OF CORE ANALYSIS 3 FLUID ANALYSIS 3 WELL REPORTS 3 COPIES
 FINAL COPIES OF CORE ANALYSIS 2 DST REPORTS 2 MAIL TO: Canada Southern
c/o Welton Engineering Ltd.

TYPE LOG	RUN NO.	SCALE	INTERVAL	
			FROM	TO
IES	1	2"	TD	Surf. Csg.
		5"	TD	Surf. Csg.
BHC Sonio	1	2"	TD	Surf. Csg.
GR		5"	TD	Surf. Csg.

SAMPLES AND DRILLING TIME CONTROL				
COMPANY	FEET PER SAMPLE	INTERVAL		DRILLING CONTROL
		FROM	TO	
CSP	10'	Surf.	TD	Time
IOE	10'	Surf.	TD	Time

SEND GOVERNMENT SAMPLES TO (Coal Survey of Canada)
 SEND ONE COPY OF RECORDS TO (3303-33 S. W. Cal.)
 MARK DEPTH ON GEOLOGICAL EACH CONNECTION Yes

SPECIAL GEOLOGICAL INSTRUCTIONS

Set 7" casing on pick of top of Permian Penn or first limestone.

THE UNIVERSITY OF CHICAGO

[Illegible text]

DATE	ITEM	QTY	UNIT	PRICE	TOTAL	REMARKS
9-7-5	350 SACKS	7	20.0	5	840	850 350 SACKS

2-28-66	0-0-0-0	COVER SHEET	FLAT SHOE	Y	FLAT COLLAR	OTHER
LOCATION: _____ CENTRAL TEND: _____ REMARKS: _____						
1. 0-0-0-0 + 1 50' off bottom REMARKS: _____						
2-28-66 0-0-0-0 COVER SHEET FLAT SHOE FLAT COLLAR OTHER LOCATION: _____ CENTRAL TEND: _____ REMARKS: _____						

INTERVAL	WEIGHT LBS. GALL.	VOLUME CU. YD.	WATER LOSS CC	PH	REMARKS
0-10	100	1.0	100	7.0	Soil and as required to control surface gravels
10-20	100	1.0	100	7.0	Water
20-30	100	1.0	100	7.0	
30-40	100	1.0	100	7.0	
40-50	100	1.0	100	7.0	
50-60	100	1.0	100	7.0	
60-70	100	1.0	100	7.0	
70-80	100	1.0	100	7.0	
80-90	100	1.0	100	7.0	
90-100	100	1.0	100	7.0	

[illegible]

Lost circulation in surface gravels.

Lost circulation in Mississippian

collect water samples of all tests either swab or DST. Get resistivities
from wire logging.

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.

CALYNDOR

TO: NAVY SECTION 269-7741 269-7741

2. THE STATE OF TEXAS

COMMENTS: 201-10-10

WORLDWIDE

Canada Southern (Geol)

242-4698

107-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-1099-1100-1101-1102-1103-1104-1105-1106

42 111 25 145

243-2230

REPORTING OFFICER'S NAME AND TITLE: _____

UNITED STATES OF AMERICA

100-443887-100

1220 GUN-CESS HOUSE

CONFIDENTIAL

ALL SERVICE TICKETS MUST BE SIGNED BY A REPRESENTATIVE OF THE

SECRET

1940

SPECIAL INSTRUCTIONS ATTACHED

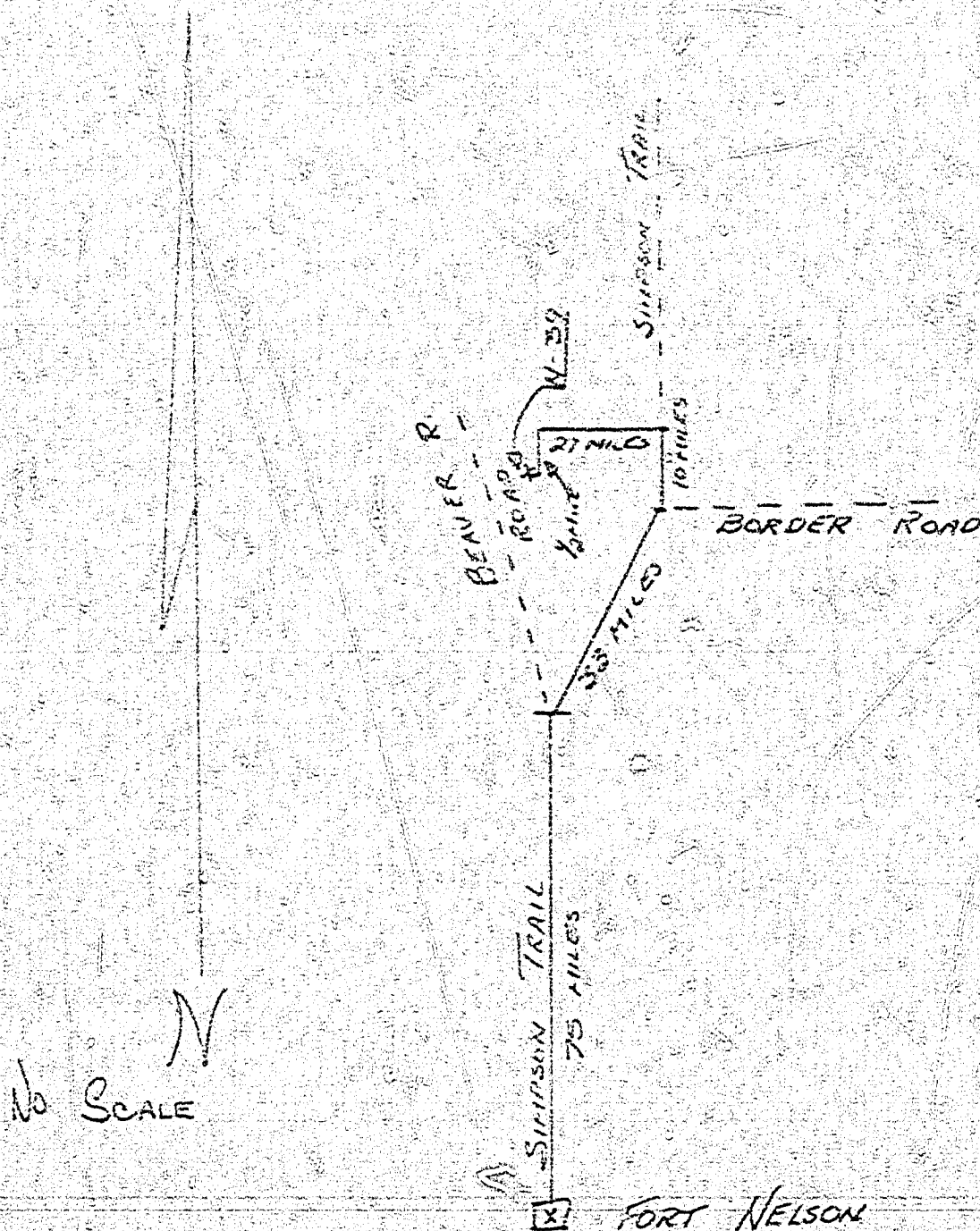
PREPARED:

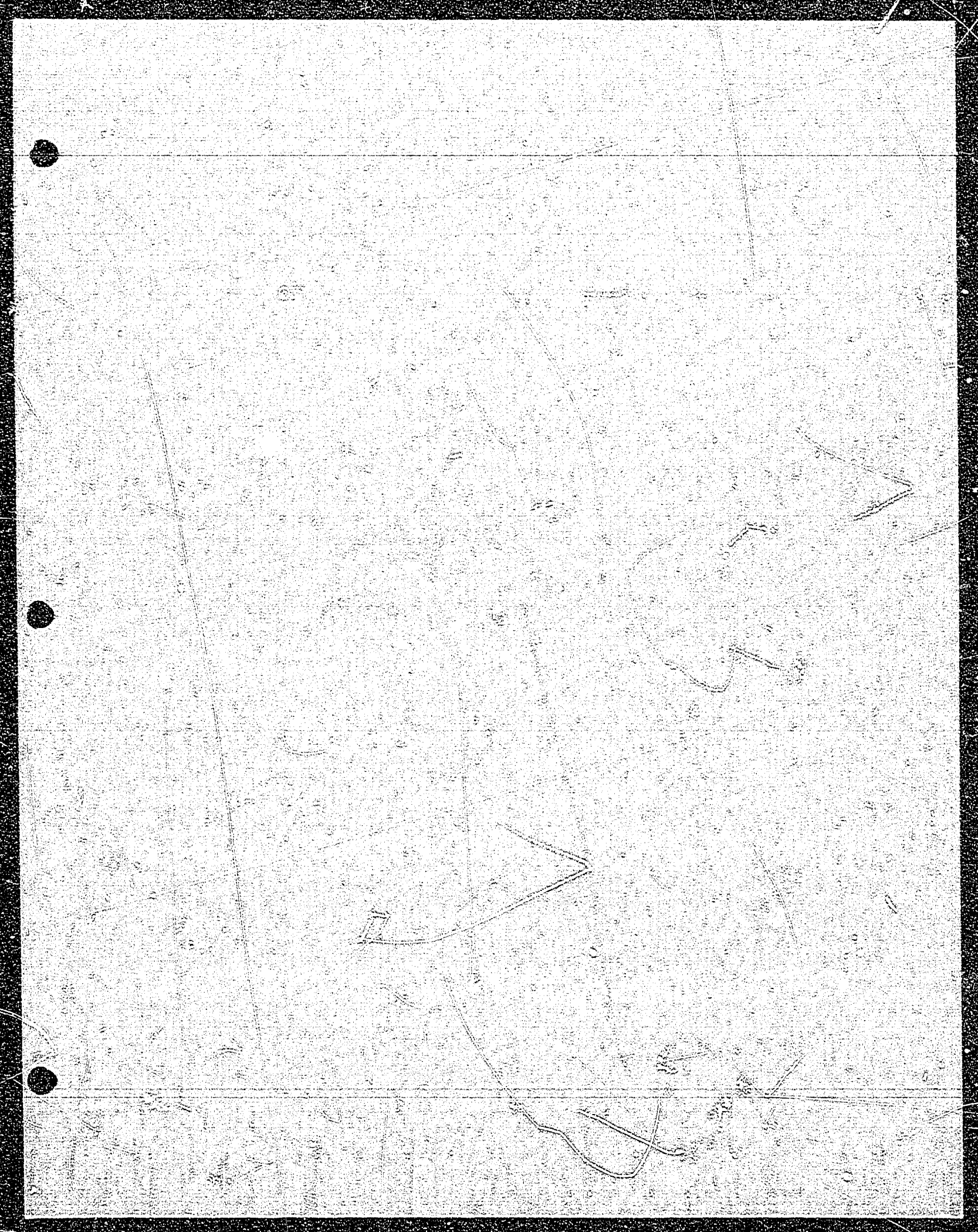
March 10th is 70

INITIAL WDE

LOCATION SKETCH

(Directions to Location)





CANADA SOUTHERN CILIBETA N-49

ELECTRIC LOG TOPS

K.B. Elevation 1496.2

| <u>Formation</u> | <u>Depth</u> | <u>Subsea</u> |
|------------------|--------------|---------------|
| Permian | 780 | + 718 |
| Mississippian | 870 | + 628 |
| Total Depth | 1003 | + 495 |
| Driller | 997 | + 501 |

WE HAVE One Year Collection
LOCATION 21

SHEET NO. 1 of 2
DATE: 1/20/70

FORM ID: M-554

GEOLOGIST

PAGE

HILTON ENGINEERING LTD WELLSITE SAMPLE DESCRIPTION

WELL NAME CLAYTON

SHEET NO 247

LOCATION CLAYTON

DATE 3/11/78

| LITHOLOGY | DEPTH | SAMPLING
POINTS | SAMPLE DESCRIPTION |
|-----------|-------|--------------------|-------------------------------|
| CLAY | 10 | 10 | CLAY, 10' CRACK, NEW AND FINE |
| CLAY | 10 | 10 | CLAY, 10' CRACK, NEW AND FINE |
| CLAY | 10 | 10 | CLAY, 10' CRACK, NEW AND FINE |
| CLAY | 10 | 10 | CLAY, 10' CRACK, NEW AND FINE |
| CLAY | 10 | 10 | CLAY, 10' CRACK, NEW AND FINE |
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| CLAY | 10 | 10 | CLAY, 10' CRACK, NEW AND FINE |
| CLAY | 10 | 10 | CLAY, 10' CRACK, NEW AND FINE |
| CLAY | 10 | 10 | CLAY, 10' CRACK, NEW AND FINE |

APPENDIX C: ABBREVIATIONS AND SYMBOLS

55555

STROMATOPORA
ALGAE
EASTROPUS
BRACHYDIPLO
ULTRACORAL
MORPHOLOGY
CORALS
CORALS
TETRAPODITES
PHYTOLOG

[Faint, illegible handwritten text]

CONFIDENTIAL

SALT CROST
CRYSTALITE / GYPSUM
BENTONITE
SECONDARY CALCITE
IRREGULAR WHITE SPEDS
FUSILLIFEROUS
FISH REMAINS / SCALPS, TEETH, BONES
GREAT / FISHBONE / BONE / BONE
CHART / BONE
SILICEOUS
PHOSPHATE PELLETS
SIDERITE PELLETS
MASSIVE SIDERITE
GLAUCONITE
STYLOLITE
MICA
PYRITE
FLUATING SAND GRAINS
COAL / ASH / MALT / GLAUCONITE
BUTYRIN
METAMORPHICS
LAVA
GRANITE
QUARTZITE

There are letters by sundry persons in the name of
bearing the name of the person who has been

SANDY
LIGHT
COLORED
CALCAREOUS / L. SP. 100

100

[illegible]

NEOLOGICAL SUMMARY

The subject well was drilled as a prospective Permian, Mississippian, wildcat gas well.

Wellbore sample evaluation was initiated at a depth of 500'. In the Lower Cretaceous. This formation consisted of grey to black micro-siliceous fissile shales and glauconitic siltstones.

The Permian Dalloy consisted of limestone in the upper section with porous, stained dolomite and chert in the middle and lower portion. The oil stain was observed to be residual or dead oil staining.

Subsequent swabbing of this interval produced fresh water.

The Mississippian formation consisted primarily of an extremely fine to fine crystalline dolomite, light to dark brown in color with no intercrystalline porosity. The porosity noted in this rock type is a result of evident vugs and/or fractures. Periodic layers of a very finely sacrosic dolomite, having traces of fair intercrystalline porosity, were also evident in this section. Fair to good residual, or dead oil staining, was apparent throughout. Bedded chert, approximately 15' thick, having traces of fair porosity and staining, was also noted in this section.

Vugs and fractures, as evidenced by samples and roughness of drilling, resulted in the loss of approximately 100 bbls. of drilling fluid to this formation. Lost circulation was controlled by the use of sawdust.

The prospective reservoirs encountered, proved to be wet by swabbing or logs and the well was plugged and abandoned at a depth of 997'.

WATER SAMPLING LOG

DATE: 3/18/76

3/18/76

DEPTH: 625'

FORMATION: PERMIAN

| <u>DEPTH</u> | <u>SWAB NO.</u> | <u>TYPE FLUID</u> | <u>FLUID DEPTH</u> |
|--------------|-----------------|-------------------|--------------------|
| | 1 | Drill Water | Surface |
| | 2 | Drill Water | 400' |
| | 3 | Drill Water | 400' |
| | 4 | Drill Water | 400' |
| | 5 | Drill Water | 400' |
| | 6 | Drill Water | 400' |
| | 7 | Drill Water | 400' |
| | 8 | Drill Water | 400' |
| | 9 | Drill Water | 400' |
| | 10 | Drill Water | 400' |
| | 11 | Drill Water | 400' |
| | 12 | Formation Water | 400' |
| | 13 | Formation Water | 400' |
| | 14 | Formation Water | 400' |
| | 15 | Formation Water | 400' |
| | 16 | Formation Water | 400' |
| | 17 | Formation Water | 400' |
| | 18 | Formation Water | 400' |
| | 19 | Formation Water | 400' |
| | 20 | Formation Water | 400' |

Total - 60 Bbls.: 20 Swabs; App. 30-35 Bbls. Drill Water
25-30 Bbls. Formation Water

Formation Water Titrates Fresh

RECORD

1950

W. W. W.

Form 4

CANADA SOUTHERN CALIBRETA N-19

DEVIATION SURVEYS

| <u>Depth</u>
<u>Feet</u> | <u>Deviation</u>
<u>Degrees</u> | <u>Change</u>
<u>Degrees</u> | <u>Interval</u>
<u>Feet</u> | <u>Hole Size</u>
<u>Inches</u> |
|-----------------------------|------------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| 127 | 1/2 | + 1/2 | 127 | 9-7/8 |
| 216 | 3/4 | + 1/4 | 89 | 9-7/8 |
| 304 | 7/8 | + 1/8 | 88 | 9-7/8 |
| 425 | 3/4 | - 1/8 | 121 | 9-7/8 |
| 518 | 2/4 | 0 | 93 | 9-7/8 |
| 610 | 7/8 | + 1/8 | 92 | 9-7/8 |
| 733 | 1 | + 1/8 | 123 | 9-7/8 |
| 997 | 1 | 0 | 264 | 6-1/4 |

MELTON ENGINEERING LTD.

PIPE TALLY

CANADA SOUTHERN COLUMBIA N-39 (N.W.T.)

OPERATOR CANADA SOUTHERN RAILWAY LTD. TO-CITY RAIL #3

PIPE DESCRIPTION Casing 7" 10 H 2

CHS 5" 10" SHORT Japan NEW OR LESS New

WORK ORDER NO. Surface casing M. G. Engen

| FOOTAGE | | FOOTAGE | | FOOTAGE | | FOOTAGE | | FOOTAGE | |
|-----------------------------|-------------|-------------------------|-------------|----------------|-------------|----------------|-------------|-----------------|-------------|
| NO. | FEET INCHES | NO. | FEET INCHES | NO. | FEET INCHES | NO. | FEET INCHES | NO. | FEET INCHES |
| | 41 93 | | *41 33 | | | | | | |
| | 41 75 | | *41 00 | | | | | | |
| | 41 50 | | *41 42 | | | | | | |
| | 41 47 | | | | | | | | |
| | 41 38 | | | | | | | | |
| | 41 50 | | | | | | | | |
| | 41 44 | | | | | | | | |
| | 41 30 | | | | | | | | |
| | 41 07 | | | | | | | | |
| | 41 62 | | | | | | | | |
| TOTAL
1-10 | 414 97 | TOTAL
21-30 | 123 75 | TOTAL
41-50 | | TOTAL
61-70 | | TOTAL
81-90 | |
| | 41 45 | | | | | | | | |
| | 40 93 | | | | | | | | |
| | 40 88 | | | | | | | | |
| | 41 00 | | | | | | | | |
| | 41 20 | | | | | | | | |
| | 41 00 | | | | | | | | |
| | 40 80 | | | | | | | | |
| | 41 06 | | | | | | | | |
| | *41 70 | | | | | | | | |
| | *42 40 | | | | | | | | |
| TOTAL
11-20 | 413 22 | TOTAL
31-40 | | TOTAL
51-60 | | TOTAL
71-80 | | TOTAL
91-100 | |
| TOTAL
1-20 | 828.19 | TOTAL
21-40 | 123.75 | TOTAL
41-60 | | TOTAL
61-80 | | TOTAL
81-100 | |
| TOTAL
1-20 | 828 19 | GRAND TOTALS
1-100 | | REMARKS | | | | | |
| TOTAL
21-40 | 123 75 | GRAND TOTALS
101-100 | | | | | | | |
| TOTAL
41-60 | | GRAND TOTALS | | | | | | | |
| TOTAL
61-80 | | GRAND TOTALS | | | | | | | |
| TOTAL
81-100 | | GRAND TOTAL | | | | | | | |
| GRAND TOTAL
1-100 | 951 94 | | | | | | | | |
| *Left out of string | | | | | | | | | |
| TOTAL JOINTS ON LOCATION 23 | | | | | | | | | |
| AGENT OF OPERATOR: G. Engen | | | | | | | | | |

HILTON ENGINEERING LTD.

RUNNING and CEMENTING

Surface Casing
Intermediate Casing
Production Casing
Liner

00 1

GENERAL

Well CANADA SOUTHERN CELIBETA Location N-35 (N.W.T.) Date March 16/70

K.B. Elevation 1490' K.B. Casing Pipe 9.0 Total Depth (Order) 764'

| | | | |
|-----------|---------------|-----------|--|
| Make Size | <u>9-7/8"</u> | Casing in | |
| Depth | <u>764</u> | Depth Set | |

Make Type G01 Wt. 9.4 Visc. 70 W.L.

S.O.P.'s

RUNNING

Power Torque _____ Torque: Max _____ Nom _____ Min _____

Time pipe made _____ Time at bottom _____ Time Circulated _____

Fill up Points _____ Blm. by Csg. _____ Ft. up from K.B. _____

Remarks _____

CEMENTING

Cement Co. Tri-City Reg #3 Operator Toolpush Time on Location _____

Types & Quantities of Cement 300 sacks of construction, plus 2% CaCl₂

Ht. to be Cemented Surface

Water ahead 10 bbls. Mix Times: Start _____ Finish _____ Slurry Wt. 15.6

Cale. Disp. 31 bbls. Measured Disp. 31 bbls. Displacement: Start _____ Finish _____

Max. Pumping Press. 200 Bump Press 500 Bumped by _____ No. Times Bumped _____

Cement Returns: Yes/No yes Float held yes Work Casing 25' feet while Circulating/Cementing

Remarks _____

LANDING

Time Landed 2:30 P.M. Date March 17/70 Init. Wt. of Cem. String (less blocks) _____

Wt. Landed in Slips _____ Make of Bowl NAT. Nom. Size 8" Series _____

Slip & Seal Assembly _____ Remarks _____

OPERATOR Canada Southern Petroleum Ltd.

AGENT OF OPERATOR M. G. Engen

HUSTON ENGINEERING LTD.

PLUG-BACK AND ABANDONMENT REPORT

Well CANADA SOUTHERN OILBETA Location N-39 (N.W.T.)

Hole Size 7 1/4" 6-1/4" K.B. Elev. 1498.2
Depth 754 13997 F.T.D. 997

| Casing in Hole | Size | Set at | Top of Fluid in Hole | Cel. Made |
|-------------------|------|--------|----------------------|---------------------------------|
| Surface Casing | 7 | 755.62 | Surface | Plug Back String D.P. |
| Production String | | | | Service Company Tri-City Rig #3 |
| | | | | Cons. Bd. Officer |

| | Plug 1 | Plug 2 | Plug 3 | Plug 4 | Plug 5 | Plug 6 |
|-------------------------------|----------------------|--------|--------|--------|--------|--------|
| Date | 3/20/70 | | | | | |
| Interval - Top | 700 | | | | | |
| Bottom | 997 | | | | | |
| Formation - Name | Perm. & | | | | | |
| Depth | Miss. | | | | | |
| Calipered Hole Size (Average) | 6-1/4" | | | | | |
| Type of Cement | Cons. | | | | | |
| No. of Sacks | 100 | | | | | |
| Additives | 2% CaCl ₂ | | | | | |
| Bbls. of Water Ahead | 10 | | | | | |
| Displacement - Bbls. Water | 33 | | | | | |
| Bbls. Mud | - | | | | | |
| Slurry Weight | 15.6 | | | | | |
| Mixing Times - Start | 2:30PM | | | | | |
| Finish | | | | | | |
| Displacing Times - Start | | | | | | |
| Finish | 3:30PM | | | | | |
| Felt Plug Time | 1:30 PM | | | | | |
| Felt Plug Depth | 695 | | | | | |

Surface Casing Cut 3 Ft. Below Grd. Surface Plug 5 Sacks.
Plate Welded Yes/No

CASING SALVAGE: Shot off at - No. of Jts. Recovered
Remarks Dumped 5 sacks in casing - welded on plate with 4 ft. steel pole - Plate welded to pole with well name & location

Operator: Canada Southern Agent of Operator: M. G. Engen
Form 3-34 Petroleum Ltd.

CANADA SOUTHERN CELLULOSA N-39

Lease Construction and Rig Move

CHRONOLOGICAL REPORT

(as of 8:00 A.M.)

- March 9, 1970: Drove from Red Deer to Dawson Creek.
- March 10, 1970: Drove from Dawson Creek to Fort Nelson. Stayed at Fort Nelson Hotel. Contacted cats by mobile and told them to start north on the Simpson Trail.
- March 11, 1970: Flew over lease with Kier pilot and cat pusher. Returned to Fort Nelson. Cats at turn-off at 9:30 A.M. to start in on seismic line. Cleaned lines for 19 miles and shut down overnight.
- March 12, 1970: Cats finished cleaning line in to N-39 location. Drove from Fort Nelson to cat camp. Arrived at location at 8:00 P.M.
- March 13, 1970: Measured off and staked both leases. Cats cleaned off road to lease No. 2. Dug pits at second location and returned to lease No. 1. Prepared pits and sump.
- March 14, 1970: Finished lease construction. Waited for fuel to move out.
- March 15, 1970: Tool pusher requested further work on leases. Cats finished off and started out at 12:00 noon. Drove back to Fort Nelson with U-Drive truck to get mobile phone for rig.
- March 16, 1970: Picked up mobile phone and left Fort Nelson at 12:00 noon. Drove to rig. Could not establish contact with Ft. Nelson. Rig drilling at 700' at 8:00 P.M.
- March 17, 1970: Drove to Ft. Nelson. Lined up new mobile for geologist.

Supervision by J. P. Cotter

ONLY DRILLING REPORT

NELSON ENGINEERING LTD.

At 9:00 a.m.

OSAMA, SULTANA, CELIBATA, N-39

| | | | | | | | | | |
|---------------|------------------------|------|---------------|-----|----------|-----|-----------|---------|---|
| Date | March 16/70 | Expn | 304 | ft. | Progress | 304 | ft. | Day No. | 1 |
| Operation | Drilling | | | | | | | | |
| Contract hrs. | Day work hrs. | | Rotating hrs. | | 11 | | Trip hrs. | | |
| Other | Mix gnl 1: survey 1/2. | | | | | | | | |

| MUD | | SURVEYS | | TRIPS — PULLED | |
|------------|------------|---------|------------|----------------|----------------------------------|
| Properties | Activities | | | | |
| Wt. 9.2 | 6500 gal | 127 | n. 1/2 deg | Bit No. ③ | ft. Full |
| Visc. 35 | 25 ft | 216 | n. 3/4 deg | Bit No. ② | ft. Full |
| W/L | | 304 | n. 7/8 deg | | |
| FC | | | n. deg | PIPE STRAPS | |
| WPE | | | n. deg | Tally | ft. Board |
| Other | | | n. deg | | Correction |
| | | | n. deg | | ft. Yes ☐ |
| | | | | | No ☐ |
| | | | | Tally | ft. Board |
| | | | | | Correction |
| | | | | | ft. Yes ☐ |
| | | | | | No ☐ |

Operations past 24 hrs. Moved in and rigged up Tri-City rig #3. Spudded at 7:30 P.M. Drilled 9-7/8" hole to 304'

Date March 17/70 Depth 764 ft. Progress 460 ft. Day No. 2
 Operation Tripping for casing
 Contract hrs. Day work hrs. Rotating hrs. 9-1/2 Trip hrs.
 Other Rig service and surveys 1: Mix gel 1-1/2: Dummy trips -
 working and reaming tight hole 10-1/2: Wait on orders 1-1/2.

| MUD | | SURVEYS | | TRIPS — PULLED | |
|-------------|-----------|---------|-------------|-----------------|---|
| Proportions | Additives | | | Bit No. | @ _____ ft. Fill _____ ft. |
| Wt. 9.4 | 750# gel | 425 | ft. 3/4 deg | Bit No. 1A | @ 334 ft. Fill _____ ft. |
| Visc. 70 | 1110 75# | 516 | ft. 3/4 deg | Bit No. _____ | @ _____ ft. Fill _____ ft. |
| WL _____ | | 610 | ft. 7/8 deg | | |
| FC _____ | | 733 | ft. 1 deg | PIPE STRAPS | |
| PH _____ | | | ft. deg | Tally _____ ft. | Board _____ ft. Correction Yes ☐ No ☐ |
| Other _____ | | | ft. deg | Tally _____ ft. | Board _____ ft. Correction Yes ☐ No ☐ |
| | | | ft. deg | | |

Operations past 24 hrs. Drilled 9-7/8" hole to 334' K.B. Tripped for bit #2A.
Ran in and drilled 9-7/8" hole to 764' K.B. Conditioned hole and started
tripping for casing.

DAILY DRILLING REPORT

MELTON ENGINEERING LTD.

As of 8:00

Well Name & No. CANADA SOUTHERN OILFIELD S-39

Date March 18/70 Depth 764 ft. Progress 0 ft. Day No. 3

Operation W.O.C. - Nipping Up

Contract hrs. Day work hrs. Rotating hrs. Trip hrs.

Other Run casing 1-1/2: Circulate casing 1-1/2: Cement casing 1: W.O.
8: Rig to run casing 1/2: Nipple up 7-1/2: Pressure testing frame. H
casing 3/4: Run in to drill cement 1/2: Drill cement 3/4.

| MUD | | SAVES | | TRIPS - PULLED | |
|------------|-----------|-------|-----|---------------------------|--|
| Properties | Additives | ft. | deg | Bit No. 2A @ 764 ft. Fill | |
| Wt. | | ft. | deg | Bit No. @ ft. Fill | |
| Visc. | | ft. | deg | | |
| WL | | ft. | deg | | |
| SC | | ft. | deg | | |
| PH | | ft. | deg | | |
| Other | | ft. | deg | | |
| | | ft. | deg | | |

Operations past 24 hrs. Drilled 9-7/8" hole to 764 K.B. Ran 18 joints of 7"
20# H casing (755.62) Landed casing at 755.62' K.B. and cemented with
300 sacks of construction cement plus 2% CaCl₂. Plug down at 2:30 P.M.
March 17, 1970. Waited on cement.

Date March 19/70 Depth 958 ft. Progress 134 ft. Day No. 4

Operation Drilling

Contract hrs. Day work hrs. Rotating hrs. 13-1/4 Trip hrs. 4

Other Rig service check B.C.P.'s 1/2: Displace hole 1/4: Waiting on or
1/2: Swabbing 3: Mix and lost circulation material 1-1/2: Repair

| MUD | | SURVEYS | | TRIPS — PULLED | |
|-------------|-----------------------|---------|-----|------------------|-----------------------|
| Properties | Additives | ft. | deg | Bit No. <u>1</u> | @ <u>825</u> ft. Fill |
| Wt. _____ | <u>2500# Gel</u> | ft. | deg | Bit No. <u>2</u> | @ <u>944</u> ft. Fill |
| Visc. _____ | <u>45 sk. Sawdust</u> | ft. | deg | | |
| WL _____ | <u>75# Lime</u> | ft. | deg | | |
| FC _____ | | ft. | deg | | |
| PH _____ | | ft. | deg | | |
| Other _____ | | ft. | deg | | |
| _____ | | ft. | deg | | |

| PIPE STRAPS | | | |
|-------------|-----|-------------|---------------------------|
| Tally _____ | ft. | Board _____ | ft. Yes _____
No _____ |
| Tally _____ | ft. | Board _____ | ft. Yes _____
No _____ |

Operations past 24 hrs. Drilled to 325' tripped to swab - pulled 20 swabs
(approx. 80 bbls.) fresh water and drill fluid. Tripped in - drilled
6-1/4" hole to 958'

DAILY DRILLING REPORT

HILTON ENGINEERING LTD.

As of 8:00 a.m.

Well Name & No. CANADA SOUTHERN CENIDETA N-39

Date March 20/70 Depth 997 ft. Progress 39 ft. Day No. 5

Operation W.O.C. and Abandoning

Contract hrs. Day work hrs. Rotating hrs. 3-3/4 Trip hrs. 2-2/4

Other R/O Service, check BOP's 1/4; Repair 1; Stuck 7-3/4; Logging 2-1/2;

Waiting on orders 2; Circulate 1/2; Run plug #1 1; W.O.C. 2-1/2;

| MUD | | SURVEYS | | TRIPS — PULLED | |
|------------|-----------|---------|-------|----------------|--------------|
| Properties | Additives | 997 ft. | 1 deg | Bit No. 3 | 997 ft. Fill |
| Wt. | | ft. | deg | Bit No. 07 | ft. Fill |
| Visc. | | ft. | deg | PIPE STRAPS | |
| WL | | ft. | deg | Tally | ft. Board |
| FC | | ft. | deg | Correction | |
| pH | | ft. | deg | ft. Yes | |
| Other | | ft. | deg | No | |
| | | ft. | deg | Tally | ft. Board |
| | | ft. | deg | Correction | |
| | | | | ft. Yes | |
| | | | | No | |

Operations past 24 hrs. Drilled to 997', stopped circulation to clean pump and repair weight indicator, down time 1/4 hr. While repairing rig, the drill pipe became differentially stuck. Calculated true point and spotted 5 bbls. of diesel plus 20 gals. of Be-Free. Pipe pulled loose in 1/4 hr. with 15,000 lbs. Circulated hole and tripped for logs. Ran SOC logs, IES and BSCSGR from T.D. to surface casing. Ran plug #1 from 997' to 700' using 100 sacks of construction cement plus 2% CaCl₂. Plug down at 5:30 A.M., March 20, 1970. Waited on cement.

Date March 21/70 Depth - ft. Progress - ft. Day No. 6

Operation Plugged and Abandoned

Contract hrs. Day work hrs. 10 Rotating hrs. Trip hrs.

Other W.O.C. 4-1/2; Peel plug 1/2; Cut casing and tear out 5.

| MUD | | SURVEYS | | TRIPS — PULLED | |
|-------------|-----------|---------|------|----------------------------------|-----------------|
| Properties | Additives | ft. | deg. | Bit No. _____ | ft. Fill _____ |
| Wt. _____ | _____ | ft. | deg. | Bit No. _____ | ft. Fill _____ |
| Visc. _____ | _____ | ft. | deg. | | |
| WL _____ | _____ | ft. | deg. | PIPE STRAPS | |
| FC _____ | _____ | ft. | deg. | Tally _____ | ft. Board _____ |
| pH _____ | _____ | ft. | deg. | Correction | |
| Other _____ | _____ | ft. | deg. | ft. Yes ☐ | |
| _____ | _____ | ft. | deg. | No ☐ | |
| _____ | _____ | ft. | deg. | Correction | |
| _____ | _____ | ft. | deg. | ft. Yes ☐ | |
| _____ | _____ | ft. | deg. | No ☐ | |

Operations past 24 hrs. Waited on cement. Ran in and felt plug #1 at 695' at 1:00 P.M., March 20, 1970. Placed 5 sack cement plug in casing, cut casing 3' below ground level, welded on steel plate and installed dry hole marker. Rig released at 6:00 P.M., March 20, 1970.



CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. C70-5857

Received: March 24, 1970 Reported: March 26, 1970 Well Location: Canada Southern Cellbeta N-39, 60° 08' 50"N, 122° 36' 50"W

Operator: CANADA SOUTHERN PETROLEUM LTD.

Field or Area: N.W.T.

Elev.: Kft

Grid

Zone/Formation:

Permit/Jan

Sampled from: swabbing

Sampled by: M. Engen

Sample Interval: 755' - 825'

Method of Production: Swabbing #20

Date Mar. 17, 1970

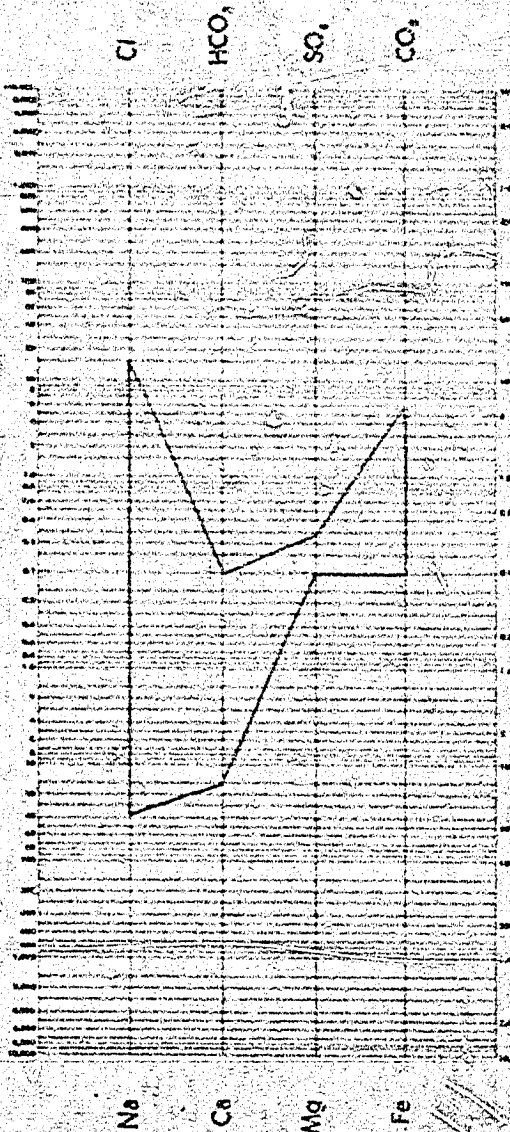
OTHER PERTINENT DATA

S. J. Russell
(Signed) Helton Eng.

| | Na | K | Ca | Mg | SO ₄ | Cl | CO ₃ | OH |
|--------|-------|---|-------|-------|-----------------|-------|-----------------|-------|
| Mg./L | 872 | | 316 | Trace | 13 | 550 | 143 | 564 |
| Meq./L | 37.93 | | 15.77 | Trace | 0.27 | 15.51 | 4.76 | 33.16 |
| Meq. % | 35.32 | | 14.68 | --- | 0.25 | 14.44 | 4.43 | 30.89 |

Total Solids Mg/L: By Evaporation 2760 Fe Present Specific Gravity 1.003 @ 60°F Observed pH 10.7 @ 73 °F
Calculated 2458 After Ignition 2290 H.S. N11 Refractive Index 1.3334 @ 25°C Resistivity 1.08 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

The sample as received contained approximately 10 per cent grey sediment. The filtrate was colorless.

Canada Southern Celibeta

N-39

CANADA SOUTHERN CELIBETA 8-39

D.A. 430

- Four Reports

Canada Southern Certificate N-39

TRI-CITY DRILLING LTD.

DAILY DRILLING REPORT

BOARD DAY WORK RECORD

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 134 LOCATION Canada - Northern Alberta AREA 39

DATE 11/12/70 19 70

[illegible][illegible]

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack

B.O.P. Test-Operated

Results

Results

From Pipe Rack

Total Contractor Time _____ Hrs.

Total Company Time Hrs.

Teeplanter

Approved by _____

Approved by _____

BOARD DAY WORK RECORD

RIG No. 3 LOCATION Canada Southern Co. N 39

AREA

DATE Mar 18 1970

NOTE—Please show **FOOTAGE** made while "Control Drilling" as well as **HOURS**.

| Tear — Midnight - 8 a.m. | | DATE <u>Mar 18 1970</u> | | | | | | | | | | | | | | | REMARKS | | | Time | | | |
|-----------------------------|----------------|-------------------------|------|------|---------|-----------|----------------|------------------------------|---------------|-------------|------|-------------|------|-----------|------|--------|---------|-----------------------------|----------|------|-------------|------|-------|
| Specify actual hours worked | | Hrs. | From | | Footage | To | Hrs. on Bottom | Wt. Drill String (1000 lbs.) | DRILL COLLARS | | | | FUEL | WATER | COAL | Stands | Start | Stop | Interval | | | | |
| | | | No. | Size | Type | Size Jets | Serial No. | Weight | R.P.M. | Ft. Drilled | Hrs. | Feet Reamed | Hrs. | CONDITION | | | | | | | | | |
| Driller | JOHN JOHNSON | 12 | | | | | | | | | | | | | | | | H. seal set. D.O.P.S. | | | 1200 | 600 | 6 |
| Derrick | WILSON | 12 | | | | | | | | | | | | | | | | Pressure in. Head Pump 7000 | | | 600 | 645 | 4 |
| Floor | DAN STOKRYN | 12 | | | | | | | | | | | | | | | | Line in with bit 40145. | | | 645 | 645 | 1/2 |
| Floor | STEVE HARRIS | 12 | | | | | | | | | | | | | | | | Pressure in. 3 1/2 Head | | | 645 | | |
| Floor | | | | | | | | | | | | | | | | | | To 1000 for 15 mins. O.K. | | | 700 | 700 | 4 |
| Motor | | | | | | | | | | | | | | | | | | Pressure in. Head to 1000 | | | 700 | 715 | 1/4 |
| Mechanic | | | | | | | | | | | | | | | | | | Drill out cement | | | 715 | 800 | 3/4 |
| Extra | | | | | | | | | | | | | | | | | | | | | | | |
| Injuries: | | | | | | | | | | | | | | | | | | | | | | | |
| Fires: | | | | | | | | | | | | | | | | | | | | | | | |
| Tear — 8 a.m. to 4 p.m. | | | | | | | | | | | | | | | | | | Company Time | | | Cont'r Time | | |
| Specify actual hours worked | | Hrs. | From | | Footage | To | Hrs. on Bottom | Wt. Drill String (1000 lbs.) | DRILL COLLARS | | | | FUEL | WATER | COAL | Stands | | | | | | | |
| | | | No. | Size | Type | Size Jets | Serial No. | Weight | R.P.M. | Ft. Drilled | Hrs. | Feet Reamed | Hrs. | CONDITION | | | | | | | | | |
| Driller | | | | | | | | | | | | | | | | | | S. R. R. Rig | | | 840 | 845 | 1/4 |
| Derrick | | | | | | | | | | | | | | | | | | Displace hole | | | 845 | 830 | 1/4 |
| Floor | | | | | | | | | | | | | | | | | | W.O.G. Check loop | | | 830 | 900 | 1/2 |
| Floor | | | | | | | | | | | | | | | | | | Dale 6 1/2 | | | 900 | 1200 | 3 |
| Floor | | | | | | | | | | | | | | | | | | Host to swab | | | 1200 | 1230 | 1/2 |
| Motor | | | | | | | | | | | | | | | | | | Run in open end to swab | | | 1230 | 1300 | 1/2 |
| Mechanic | | | | | | | | | | | | | | | | | | Rig to 4 swab | | | 1300 | 1400 | 3 |
| Extra | | | | | | | | | | | | | | | | | | | | | | | |
| Injuries: | | | | | | | | | | | | | | | | | | | | | | | |
| Fires: | | | | | | | | | | | | | | | | | | | | | | | |
| Tear — 4 p.m. to Midnight | | | | | | | | | | | | | | | | | | Company Time | | | Cont'r Time | | |
| Specify actual hours worked | | Hrs. | From | | Footage | To | Hrs. on Bottom | Wt. Drill String (1000 lbs.) | DRILL COLLARS | | | | FUEL | WATER | COAL | Stands | | | | | | | |
| | | | No. | Size | Type | Size Jets | Serial No. | Weight | R.P.M. | Ft. Drilled | Hrs. | Feet Reamed | Hrs. | CONDITION | | | | | | | | | |
| Driller | ROBERT RIZZOLI | 12 | | | | | | | | | | | | | | | | Pull out swabbing pipe | | | 1100 | 1130 | 1/2 |
| Derrick | RICHARD BURRUE | 12 | | | | | | | | | | | | | | | | Run in w/ 6 1/2 bit | | | 1130 | 500 | 1/2 |
| Floor | ROBERT NASHIM | 12 | | | | | | | | | | | | | | | | DRILL | | | 500 | 640 | 1 1/2 |
| Floor | HAMID FERRIS | 12 | | | | | | | | | | | | | | | | Lost circ. mix mud | | | 640 | 700 | 1/2 |
| Floor | | | | | | | | | | | | | | | | | | DRILL | | | 700 | 730 | 1/2 |
| Motor | | | | | | | | | | | | | | | | | | Lost line - mix mud | | | 730 | 730 | 1 |
| Mechanic | | | | | | | | | | | | | | | | | | DRILL | | | 730 | 1100 | 2 1/2 |
| Extra | | | | | | | | | | | | | | | | | | Work on pump | | | 1100 | 1120 | 1/2 |
| Injuries: | | | | | | | | | | | | | | | | | | DRILL | | | 1120 | 1200 | 1/2 |
| Fires: | | | | | | | | | | | | | | | | | | | | | | | |

Totco Ring on Bit No.

O.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time

[illegible]

Tealpusk

B.O.P. Test-Operated

Life

Results

Total Company Time

Res

Approved by _____

TRI-CITY DRILLING LTD.

DAILY DRILLING REPORT

BOARD DAY WORK RECORD

NOTE—Please show **FOOTAGE** made while "Control Drilling" as well as **HOURS**.

RIG No. 6 LOCATION CANADA SOUTHERN (ELIBETH N-39) AREA

DATE April 17 1970

[illegible]

| REMARKS | Time | | |
|------------------------------|-------------|------|----------------|
| | Start | Stop | Interval |
| SEIKING + SURVEY | 1200 | 1215 | $\frac{1}{4}$ |
| DRILL TO HOLE + CIRC. SAMPLE | 1215 | 1230 | $\frac{1}{4}$ |
| DRILL 9 1/2" + HOLE | 1230 | 1415 | $1\frac{1}{4}$ |
| CIRC. + WIT. ON ORDERS | 1415 | 330 | $1\frac{1}{2}$ |
| DUMMY TRIP TO R. TIGHT HOLE | 330 | 600 | $2\frac{1}{2}$ |
| CIRC. TO CLEAN HOLE | 600 | 700 | 1 |
| HOIST TO PUMP CASING | 700 | 910 | 1 |
| | | | 8 |
| Company Time | Cont'r Time | | |
| RIL TO RAIL CASING | 850 | 830 | $\frac{1}{2}$ |
| IRON CASING | 830 | 1200 | $3\frac{1}{2}$ |
| CIRC. CASING | 1200 | 130 | $1\frac{1}{2}$ |
| CEMENT CASING, PUMP DOWN 2" | 130 | 200 | 1 |
| W.O.C. | 230 | 400 | $1\frac{1}{2}$ |
| | | | 8 |
| Company Time | Cont'r Time | | |
| W.O.C. | 400 | 1030 | $6\frac{1}{2}$ |
| HEAD UP BOPS | 1030 | 000 | $1\frac{1}{2}$ |
| | | | 8 |
| Company Time | Cont'r Time | | |

Totco Ring on Bit No.

B.O.P. Test-Operated

D.P. Calipered Date

Results

Results

From Pipe Rack

Total Contractor Time

Mrs.

Toolpusher

Total Company Time

Mrs.

Approved by

TRI-CITY DRILLING LTD.

DAILY DRILLING REPORT

BOARD DAY WORK RECORD

RIG No. 3 LOCATION CANADA SOUTHERN CALIBETA N39

AREA

DATE MAR 11 1970

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

| Tour — Midnight - 2 a.m. | | From Footage To Hrs. on Bottom Wt. Drill String (1000 lbs.) | | | | | | | | | | DRILL COLLARS | | | | FUEL | | WATER | | COAL | | Stands | | REMARKS | | | Time | | | | |
|----------------------------------|-----------------|---|--|-------|--|---------------------|--|--------------------|--|-------|--|---------------|--|------|--|---------|--|--------------|--|------|-------------|--------|----------|---------|--|------------------------------|------|--|-------|-------|-------|
| Specify actual hours worked Hrs. | | 120 184 304 | | 6 1/2 | | 1177 1 1/4 2 3/8 15 | | No. O.D. I.D. Wgt. | | Gals. | | Bbls. | | Tons | | Singles | | | | | Start | Stop | Interval | | | | | | | | |
| Driller | DOUG JOHNSON | 12 | | | | | | | | | | | | | | | | | | | | | | | | RIG SERV + SURVEY | | | 12:00 | 12:15 | 1/4 |
| Derrick | WALTER CHYZ | 12 | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 | | | 12:15 | 2:15 | 2 |
| Floor | DAN STOKRYN | 12 | | | | | | | | | | | | | | | | | | | | | | | | CONN + SURVEY | | | 2:15 | 2:30 | 1/4 |
| Floor | STEVE HAWRYLAK | 12 | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 | | | 3:30 | 4:30 | 2 |
| Floor | | | | | | | | | | | | | | | | | | | | | | | | | | MIX BEL | | | 4:30 | 5:30 | 1 |
| Motor | | | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 HOLE | | | 5:30 | 8:00 | 2 1/2 |
| Mechanic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Extra | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Injuries: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fires: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tour — 8 a.m. to 4 p.m. | | 3:04 2:45 5:49 | | 4 | | 20 9 1/4 2 3/8 15 | | No. O.D. I.D. Wgt. | | Gals. | | Bbls. | | Tons | | Singles | | Company Time | | | Cont'r Time | | | | | | | | | | |
| Driller | | | | | | | | | | | | | | | | | | | | | | | | | | SERV RIG + SURVEY | | | 8:00 | 8:45 | 1/4 |
| Derrick | | | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 HOLE | | | 8:45 | 9:30 | 1 1/4 |
| Floor | | | | | | | | | | | | | | | | | | | | | | | | | | TRIP FOR BIT WORK TIGHT HOLE | | | 9:30 | 11:00 | 1 1/2 |
| Floor | | | | | | | | | | | | | | | | | | | | | | | | | | MIX BEL | | | 11:00 | 12:00 | 1 |
| Floor | | | | | | | | | | | | | | | | | | | | | | | | | | BEAM IN HOLE | | | 12:00 | 1:00 | 1 |
| Motor | | | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 HOLE | | | 1:00 | 1:30 | 1 1/2 |
| Mechanic | | | | | | | | | | | | | | | | | | | | | | | | | | RIG SURVEY 6 10 3/4 | | | 2:30 | 3:15 | 1/4 |
| Extra | | | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 HOLE | | | 3:15 | 4:00 | 1 1/4 |
| Injuries: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fires: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tour — 4 p.m. to Midnight | | 5:49 180 729 | | 3 | | 20 9 1/4 2 3/8 15 | | No. O.D. I.D. Wgt. | | Gals. | | Bbls. | | Tons | | Singles | | Company Time | | | Cont'r Time | | | | | | | | | | |
| Driller | ROBERT RIZZOLI | 12 | | | | | | | | | | | | | | | | | | | | | | | | SERV RIG + RIG SURVEY 5 10 | | | 4:15 | 4:45 | 1/4 |
| Derrick | RICHARD BOURQUE | 12 | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 HOLE | | | 4:45 | 5:15 | 3/4 |
| Floor | ROBERT MASHIN | 12 | | | | | | | | | | | | | | | | | | | | | | | | RIG SURVEY 6 10 3/4 | | | 5:45 | 6:00 | 1/4 |
| Floor | HAMID FERUS | 12 | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 HOLE | | | 6:00 | 7:00 | 1 |
| Floor | | | | | | | | | | | | | | | | | | | | | | | | | | TRIP TIGHT HOLE | | | 7:00 | 9:30 | 2 1/2 |
| Motor | | | | | | | | | | | | | | | | | | | | | | | | | | MIX MUD | | | 9:30 | 10:00 | 1/2 |
| Mechanic | | | | | | | | | | | | | | | | | | | | | | | | | | BEAM 300' & RUN IN | | | 10:00 | 11:30 | 1 1/2 |
| Extra | | | | | | | | | | | | | | | | | | | | | | | | | | DRLE 9 3/4 HOLE | | | 11:30 | 12:00 | 1/2 |
| Injuries: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fires: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Tefco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

B.O.P. Test-Operated

Time

Results

Total Contractor Time Hrs.

Toolpusher

Total Company Time Hrs.

Approved by

TRI-CITY DRILLING LTD.

DAILY DRILLING REPORT

BOARD DAY WORK RECORD

RIG No. 3 LOCATION CANADA SOUTHERN ALBERTA N-39

AREA

DATE MARCH 17 1970

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

| Tour — Midnight - 8 a.m. | | From Footage To | | | | | | | | | | Hrs. on Bottom | | Wt. Drill String (1000 lbs.) | | DRILL COLLARS | | | FUEL | | WATER | | COAL | | REMARKS | | Time | | |
|-----------------------------|----|-----------------|--|--|--|--|--|--|--|--|--|----------------|--|------------------------------|--|---------------|--|--|------|--|-------|--|------|--|---------|--|------|--|--|
| Specify actual hours worked | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hrs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Driller | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Derrick | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Motor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mechanic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Extra | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Injuries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fires | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tour — 8 a.m. to 4 p.m. | | From Footage To | | | | | | | | | | Hrs. on Bottom | | Wt. Drill String (1000 lbs.) | | DRILL COLLARS | | | FUEL | | WATER | | COAL | | REMARKS | | Time | | |
| Specify actual hours worked | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hrs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Driller | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Derrick | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Motor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mechanic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Extra | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Injuries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fires | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tour — 4 p.m. to Midnight | | From Footage To | | | | | | | | | | Hrs. on Bottom | | Wt. Drill String (1000 lbs.) | | DRILL COLLARS | | | FUEL | | WATER | | COAL | | REMARKS | | Time | | |
| Specify actual hours worked | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hrs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Driller | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Derrick | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Floor | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Motor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mechanic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Extra | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Injuries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fires | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Totco Ring on Bit No.

D.P. Caliper Date

Results

From Pipe Rack

Total Contractor Time

Hrs.

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time

Hrs.

Approved by