FILE NOTATIONS

Entered in NID File .....
Location Map Pinned .....
Card Indexed .....

Checked by Chief .....
Approval Letter .....
Disapproval Letter .....

COMPLETION DATA:

Date Well Completed .....

Location Inspected .....

Bond released
State or Fee Land .....

L..... WW..... TA.....
W..... OS..... PA.....

LOGS FILED

Driller's Log.....
Electric Logs (No.) .....
E..... I..... Dual I Lat..... GR-N..... Micro.....
CBC Sonic GR..... Lat..... Mi-L..... Sonic.....
CBLog..... CCLog..... Others.....

In accordance with Rule C-3
Logging Program by PWB. 9/23/70

PLACID OIL COMPANY
430 COLUMBINE BUILDING
DENVER, COLORADO 80203

July 30, 1970

Oil and Gas Conservation Commission
of the State of Utah
1588 West North Temple
Salt Lake City, Utah

Re: Placid Oil Company's
No. DU-1 U.S.A.
Utah 0145781
Wayne County, Utah

Gentlemen:

Attached are the following in connection with our Application to Drill the captioned well:

1. Applications
2. Location Plats

We would appreciate your approval at your earliest convenience.

Yours truly,

PLACID OIL COMPANY

James D. Murphree

James D. Murphree

JDM/ds

Attachments

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: PLACID OIL COMPANY

3. ADDRESS OF OPERATOR: 430 Columbine Building, Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: NW NW (820' FNL & 1145' FWL) of Section 27, T28S-R17E
At proposed prod. zone: Same SE NW NW

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ----------

7. UNIT AGREEMENT NAME: ----------

8. FARM OR LEASE NAME: U.S.A.

9. WELL NO.: No. DU-1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 27, T28S-R17E

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 70 Miles NE of Hite, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 820'

16. NO. OF ACRES IN LEASE: 1920.00

17. NO. OF ACRES ASSIGNED TO THIS WELL: 80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ----------

19. PROPOSED DEPTH: 4500' Miss. Test

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4352' G.L.

22. APPROX. DATE WORK WILL START*: September 1, 1970

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12¼"	9 5/8"	36#	500'	Cement to surface

1145
820
325' to for Cat
(check)

Propose to drill an exploratory test to the Mississippian

1. Primary Objective: Pennsylvanian "Desert Creek" formation
2. Minimum mud program: 9# fresh water mud to 2700', 10# salt saturated mud to T.D.
3. Will install and test blowout preventer equipment
4. Blowout preventers will be given daily operational tests and each test logged
5. Will drill a 8 3/4" hole from base surface casing to T.D.
6. If commercial production is indicated, will run 5½", 15.5#, J-55 casing and set with 350 sx

C-3

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED James D. Murphree TITLE District Geologist DATE July 30, 1970
James D. Murphree

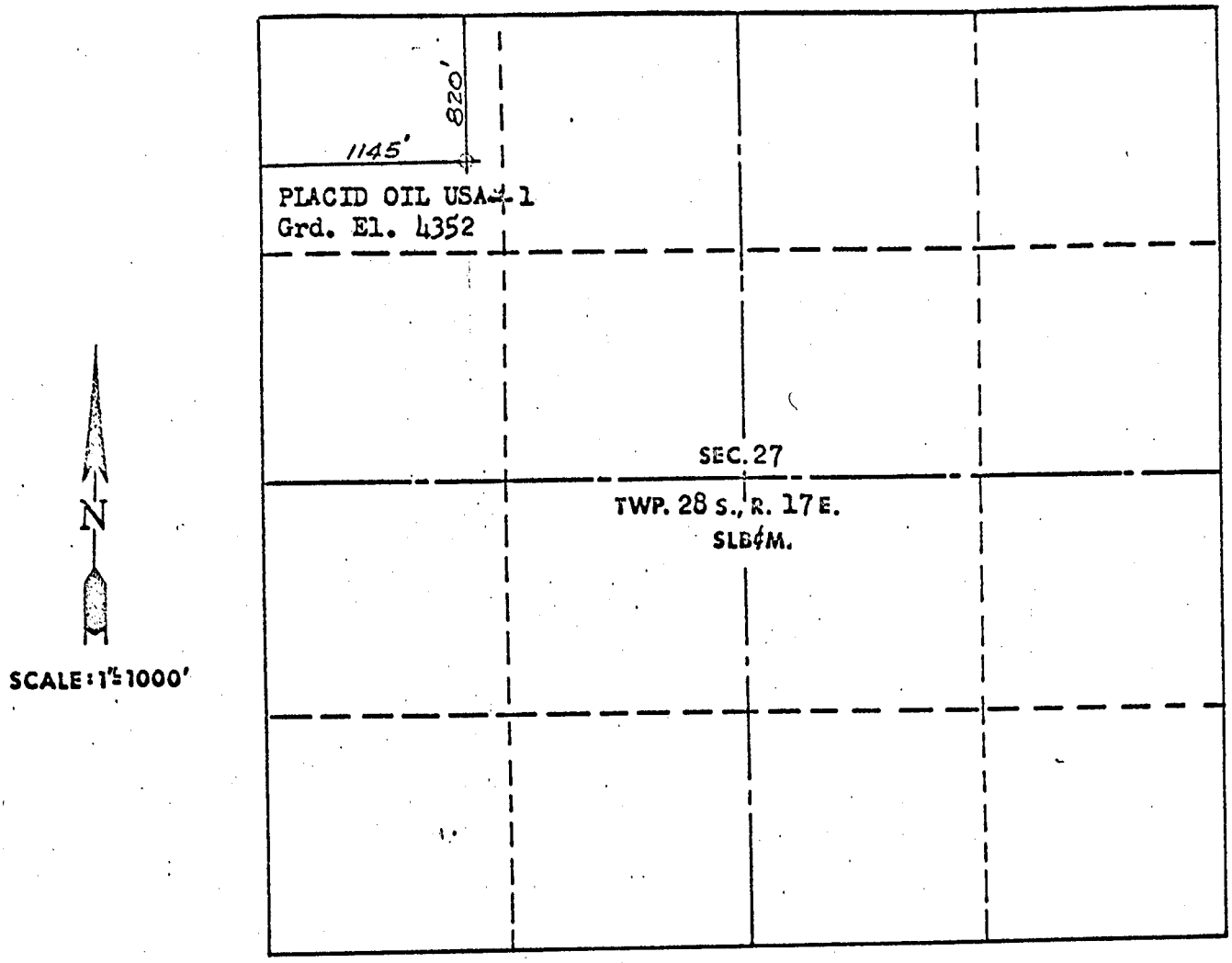
(This space for Federal or State office use)

PERMIT NO. 43-055-30009 APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



SURVEYORS CERTIFICATE

I, GEORGE H. NEWELL A REGISTERED LAND SURVEYOR AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH, HOLDING LICENSE NO. 1770, CERTIFY THAT THIS PLAT OF:

PLACID OIL USA-1

AND MORE SPECIFICALLY DESCRIBED AS FOLLOWS:

820 FEET FROM THE NORTH LINE AND 1145 FEET FROM THE WEST LINE OF SECTION 27, T. 28 S., R. 17 E., SLB&M. GROUND LINE ELEVATION 4352.

IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE June 16, 1970

George H. Newell
GEORGE H. NEWELL

FILE IN DUPLICATE

DIVISION OF OIL & GAS CONSERVATION

OF THE STATE OF UTAH

DESIGNATION OF AGENT

The undersigned producer, operator, transporter, refiner, gasoline or initial purchaser who is conducting oil and/or gas operations in the State of Utah, does, pursuant to the Rules and Regulations, and Rules of Practice and Procedure of the Division of Oil and Gas Conservation of the State of Utah, hereby appoint, CT Corporation System, whose address is 175 South Main St., Salt Lake City, Utah, (his, her or its) designated agent to accept and to be served with notices from said Board, or from other persons authorized under the Oil and Gas Conservation Act of the State of Utah.

The undersigned further agrees to immediately report in writing, all changes of address of the agent, and any termination of the agent's authority, and in the latter case, the designation of a new agent or agents shall be immediately made. This designation of agent, however, shall remain in full force and effect until and unless a new designation agent is filed in accordance with said statute and said regulations.

Effective Date of Designation June 18, 1970

Company Placid Oil Company Address 2500 First National Bank Bldg.
Dallas, Texas 75202

By W. F. Dalton Title President
W. F. Dalton (Signature)

NOTE: Agent must be a resident of Utah.

PLACID OIL COMPANY
430 COLUMBINE BUILDING
DENVER, COLORADO 80203

August 3, 1970

Oil and Gas Conservation Commission
of the State of Utah
1588 West North Temple
Salt Lake City, Utah

Re: Placid Oil Company's
No. DU-1 U.S.A.
Utah 0145781
Wayne County, Utah

Gentlemen:

With regard to our proposed test in Wayne County, Utah, we are enclosing our Mr. James D. Murphree's letter of July 30, 1970, with applications and location plats attached.

In addition, please find enclosed executed copies of forms designating CT Corporation System, 175 South Main Street, Salt Lake City, Utah, as the agent for Placid Oil Company in Utah.

Since our proposed location is located on a Federal Oil and Gas Lease, we hereby request that you waive the filing of our bond required under Rule C-1 of the General Rules and Regulations for the State of Utah, due to the fact that we presently have a nation-wide bond filed with the Bureau of Land Management.

Also due to the rough terrain in the immediate area of the proposed location, we request that the Commission grant us a topographical exception to the Rule C-3.

We would greatly appreciate your prompt approval of the above matters.

Yours very truly,

PLACID OIL COMPANY

James S. Harrell

James S. Harrell

JSH/ds

August 5, 1970

Placid Oil Company
430 Columbine Building
Denver, Colorado 80203

Re: DU-1, USA #1
Sec. 27, T. 28 S, R. 17 E,
Wayne County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well on said unorthodox location is hereby granted in accordance with Rule C-3(c).

Should you determine that it will be necessary for you to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL-Chief Petroleum Engineer
HOME: 277-2890
or
CLEON B. FEIGHT-Director
HOME: 466-4455
OFFICE: 328-5771

This approval terminates within 90 days if the well has not been spudded-in within said period.

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. The API number of this well is 43-055-30009.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sd
cc: U.S. Geological Survey

Bob Gray - Placid Oil - Wayne Co.
Dolg. - waiting on Log. (below 5000)
Jerry Daniel - USGS.

* Great near top of Mississ. base of salt ≈ 4500' sample

Potash?

(1) 35 sk @ 4000 - above top of Miss ≈ 4500 top
(2) 35 sk @ 2900 - top of Potash salt (below 2900)
(3) 35 sk across base of fresh water
(4) 50 sk bottom of surface pipe set ≈ 550'. straddle some portion
(5) screw on well or marker.

USA #1
sec 27 T 28 S R 17 E

after checking logs.
base of Wingate → (evaluate fresh Water)

9/23/70

PMB

August 27, 1970

COPY

Mr. Bob Ganser
Core Laboratories
817 West Main Street
Farmington, New Mexico 87401

Dear Bob:

Attached is a geological prognosis for our No. DU-1 U.S.A. Wayne County, Utah. This will answer most of your questions, but call me if you need any further information concerning the well. I have also enclosed correlated copies of the logs from nearby wells.

Daily reports should be mailed to me in Denver -- 2008 Denver U.S. National Bank Building; to Mr. Bill Biskamp - 2500 First National Bank Building, Dallas, Texas; and to Mr. Frank Tully - 500 Dahlia Street, Denver, Colorado.

Good luck on this Wild wildcat.

Yours truly,

Jim Murphree

JM/kp

Form 9-331
(May 1963)

UNI D STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLI ∂*
(Other instructions o re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ----

7. UNIT AGREEMENT NAME: ----

8. FARM OR LEASE NAME: U.[illegible]

9. WELL NO.: No. [illegible]-1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 27, T28S-17E

1. OIL WELL [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR: [illegible] OIL COMPANY

3. ADDRESS OF OPERATOR: 2008 United Bank Center, 1700 Broadway, Denver, Colo. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: NW NW (820' FNL & 1145' FWL) of Section 27, T28S-17E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4352' G.L.

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[XX]	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Request proposed depth change from 4500' to 5000'.

18. I hereby certify that the foregoing is true and correct

SIGNED James D. Murphree — TITLE District Geologist — DATE Sept. 14, 1970

(This space for Federal or State office use)

APPROVED BY [illegible] — TITLE [illegible] — DATE [illegible]

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

PLACID OIL COMPANY

INTER-COMPANY

CORRESPONDENCE

PLACE _____

DATE _____

September 14, 1970

United States Department of the Interior
Geological Survey
Branch of Oil and Gas Operations
8416 Federal Building
Salt Lake City, Utah 84111

Re: DU-1, U.S.A. #1
Sec. 27, T28S-R17E
Wayne County, Utah

Attention: Bernard Moroz

Request for depth change to above referrenced location is hereby submitted.

Appropriate forms are attached hereto.

Very truly yours,

James D. Murphree

James D. Murphree
District Geologist

Attachment

Form 9-331
(May 1963)

UN..ED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR
PLACID OIL COMPANY

3. ADDRESS OF OPERATOR
2008 United Bank Center, 1700 Broadway, Denver, Colo. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
NW NW (820' FNL & 1145' FWL) of Section 27, T28S-R17E

5. LEASE DESIGNATION AND SERIAL NO.
Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
---

7. UNIT AGREEMENT NAME
---

8. FARM OR LEASE NAME
U.S.A.

9. WELL NO.
No. DU-1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 27, T28S-R17E

12. COUNTY OR PARISH
Wayne

13. STATE
Utah

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4352' G.L.

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[XX]	(Other)	
(Other)					

REPAIRING WELL
ALTERING CASING
ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Request proposed depth change from 4500' to 5000'.

18. I hereby certify that the foregoing is true and correct

SIGNED James D. Murphree TITLE District Geologist DATE Sept. 14, 1970

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331 C
(May 1963)

RECEIVED
BR. OF OIL & GAS OPERATIONS
AUG 7 1970
U. S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

SUBMIT IN DUPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: PLACID OIL COMPANY

3. ADDRESS OF OPERATOR: 430 Columbine Building, Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: NW NW (820' FNL & 1145' FWL) of Section 27, T28S-R17E
At proposed prod. zone: Same

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ----

7. UNIT AGREEMENT NAME: ----

8. FARM OR LEASE NAME: U.S.A.

9. WELL NO.: No. DU-1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 27, T28S-R17E

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 70 Miles NE of Hite, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 820'

16. NO. OF ACRES IN LEASE: 1920.00

17. NO. OF ACRES ASSIGNED TO THIS WELL: 80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ----

19. PROPOSED DEPTH: 4500'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4352' G.L.

22. APPROX. DATE WORK WILL START*: September 1, 1970

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12¼"	9 5/8"	36#	500'	Cement to surface

Propose to drill an exploratory test to the Mississippian

1. Primary Objective: Pennsylvanian "Desert Creek" formation
2. Minimum mud program: 9# fresh water mud to 2700', 10# salt saturated mud to T.D.
3. Will install and test blowout preventer equipment
4. Blowout preventers will be given daily operational tests and each test logged
5. Will drill a 8 3/4" hole from base surface casing to T.D.
6. If commercial production is indicated, will run 5½", 15.5#, J-55 casing and set with 350 sx

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED James D. Murphree — TITLE District Geologist — DATE July 30, 1970

(This space for Federal or State office use)

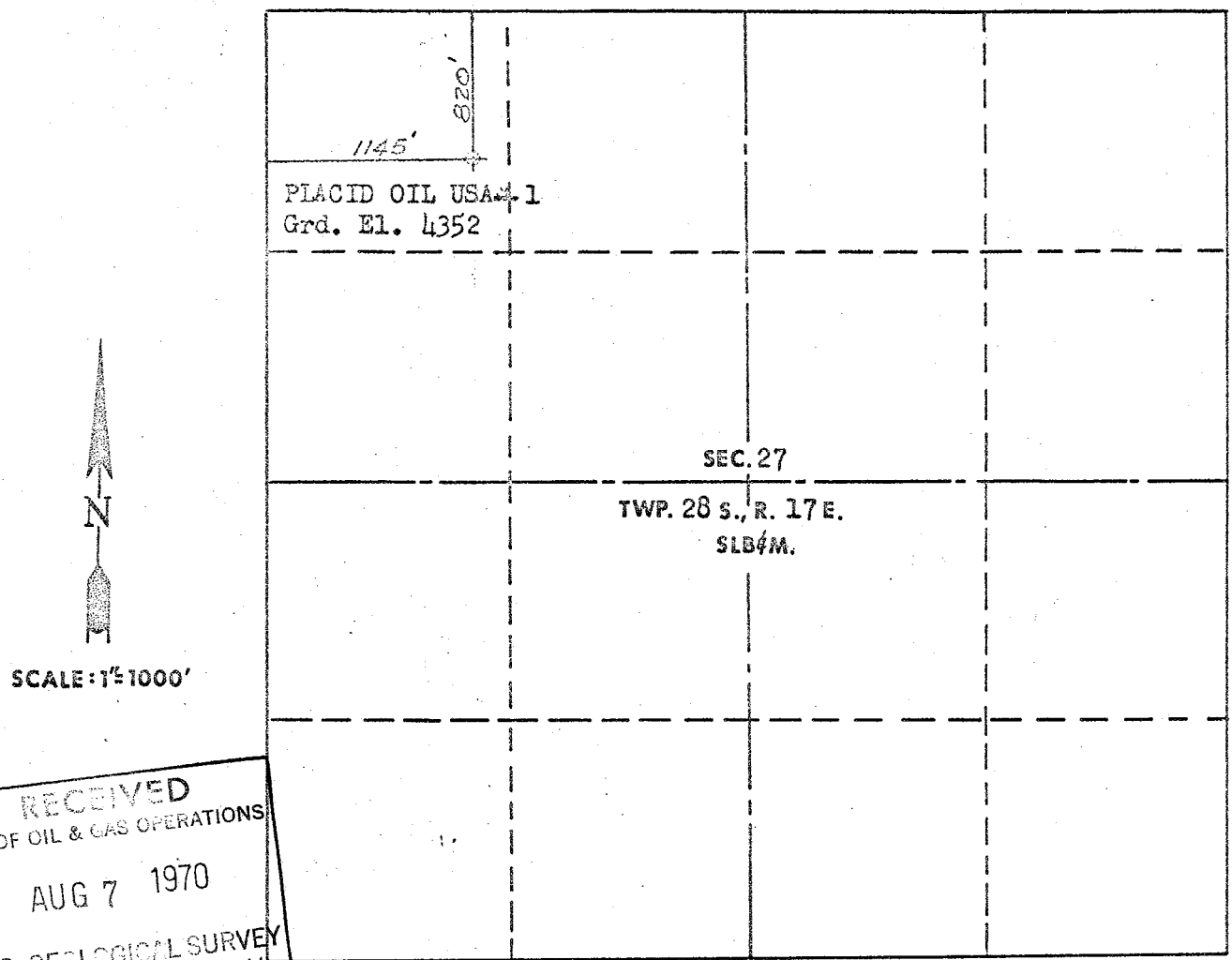
PERMIT NO. ____ APPROVAL DATE AUG 18 1970

Original signed by:
APPROVED BY Bernard Moroz — TITLE Acting District Engineer — DATE AUG 18 1970

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

SUBJECT TO ATTACHED CONDITIONS



RECEIVED
BR. OF OIL & GAS OPERATIONS
AUG 7 1970
U. S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

SURVEYORS CERTIFICATE

I, GEORGE H. NEWELL A REGISTERED LAND SURVEYOR AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH, HOLDING LICENSE NO. 1770, CERTIFY THAT THIS PLAT OF:

PLACID OIL USA-1

AND MORE SPECIFICALLY DESCRIBED AS FOLLOWS:

820 FEET FROM THE NORTH LINE AND 1145 FEET FROM THE WEST LINE OF SECTION 27, T. 28 S., R. 17 E., SLB&M. GROUND LINE ELEVATION 4352.

IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE June 16, 1970

George H. Newell
GEORGE H. NEWELL

Form 9-1123
(Rev. Dec. 1967)

(Submit in triplicate to appropriate
Regional Oil and Gas or Mining Supervisor)

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Salt Lake City, Utah
SERIAL NO.: Utah 0145781

and hereby designates

NAME: Placid Oil Company
ADDRESS: 430 Columbine Building
Denver, Colorado 80203

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Wayne County, Utah

Township 28 South, Range 17 East
Section 27: All

RECEIVED
BR. OF OIL & GAS OPERATIONS
AUG 7 1970
U. S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

(Signature of lessee)

F. M. Tully
500 Dahlia Street
Denver, Colorado 80220
(Address)

August 5, 1970
(Date)

U. S. GOVERNMENT PRINTING OFFICE 16—53598-3

Conditions of Approval

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the lease terms and the operating regulations, 30 CFR 221. The following items are emphasized:

1. There shall be no material deviation from the proposed drilling and/or workover program as approved. Safe drilling and operating practices must be observed in regard to equipment and personnel. The use and frequent testing of blowout prevention equipment is mandatory. All wells, whether drilling, producing, suspended or abandoned, shall be identified in accordance with 30 CFR 221.22. Any changes in operations must have prior approval of this office.

2. All shows of fresh water and minerals will be reported and protected. All oil and gas shows will be adequately tested for commercial possibilities, reported and protected.

3. No location will be made or moved, no well will be plugged and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of this office.

4. "Well Completion or Recompletion Report and Log" (form 9-330) will be submitted not later than 15 days after completion of the wall or after completion of operations being performed, in accordance with 30 CFR 221.59. Two copies of all logs run, core descriptions, core analyses, well test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover and/or completion operations, will be filed with form 9-330. Samples (cuttings, fluid and/or gas) will be submitted only when requested by this office.

5. "Sundry Notices and Reports on Wells" (form 9-331) will be filed for all changes of plans and other operations in accordance with 30 CFR 221.58. Emergency approval may be obtained verbally, but such approval does not waive the written report requirement.

6. Other: _____

7. The U. S. Geological Survey district office address is:
   8416 Federal Building
   Salt Lake City, Utah 84111 Phone 524-5650 (area code 801)

   Dist. Engr. _____ Phone _____
   Asst. Engr. _____ Phone _____

12/68

Marshall
Wagner

file
Utah

M E M O R A N D U M

DATE: August 31, 1970

TO: "All Oil and Gas Operators and Drilling Contractors in the State of Utah

FROM: Carlyle F. Gronning, Utah State Industrial Commission

It is again brought to your attention that the Industrial Commission of Utah has adopted the recommendations and practices of the Safety Committee of the American Association of Oil Well Drilling Contractors, as outlined in the document entitled, "Rotary Drilling Handbook on Accident Prevention and Safe Operating Practices."

Since their adoption, two questions have arisen relative to these rules; the taking of Drill Stem Tests and Swab Testing at night. Your attention is directed to the following:

With regard to Drill Stem Testing at night, please refer to Page 164, Paragraph 22, which in part reads "All drill stem tests should be conducted so that the trip out of the hole will take place during daylight hours only." However, the Commission will allow drill stem testing at night if the operator backscuttles the fluids.

With regard to Swab Testing at night, please refer to Page 135, which states, "A restricted zone should be established. All lights, open fires, and smokers should be kept off of this area. The well should be brought in during daylight."

STATE OF UTAH
INDUSTRIAL COMMISSION

Carlyle F. Gronning

CARLYLE F. GRONNING, Chairman

No. DU-1 USA File

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

August 20, 1970

REPLY TO:
522 PATTERSON BUILDING
DENVER, COLORADO 80202

Placid Oil Company
2008 United Bank Center Building
1700 Broadway
Denver, Colorado 80202

Attention: Mr. James D. Murphree

Subject: 2 Man Mud Log Unit
No. 1 DU-USA Well
SEC 27-28S-17E
Wayne County, Utah

Gentlemen:

This is to confirm our quote for a two man logging unit on the subject well of $150.00 per day for logging and standby time at the rate of $95.00 per day, to cover periods of at least 24 consecutive hours, or multiples thereof.

The equipment will include:

1. Conventional Hot-Wire gas detector.
2. Automatic chromatograph analysis.
3. Drilling rate recorder.
4. Intercom system from logger to rig.
5. Formation cuttings analysis (interval 2' to 10', as directed by wellsite geologist, according to drilling rate).

Optional equipment which may be used:

1. Mud resistivity meter - no charge.
2. Shale density - $5.00 per day additional.

We appreciate this opportunity to be of service to you.

Very truly yours,

CORE LABORATORIES, Inc.

J. A. Wilkinson
Log Supervisor

JAW:vw

GEOLOGICAL PROGNOSIS

Well: Placid Oil Company No. DU-1 U.S.A.

Location: 820' FNL & 1145' FWL Sec. 27, T28S, R17E
Wayne County, Utah

Elevation: 4352' G.L.

Proposed Total Depth: 4300'

Samples: Samples should be caught from surface to T.D. at 10' intervals.

Mud logging: A Core-Labratories, two-man mud logging unit will be placed in operation at the time we drill-out from under surface casing.

Logging Program:

Induction Electrical Log: Surface-top salt @2630'±
Gamma-Ray Laterolog: 2630'±-T.D.
Sidewall Neutron Porosity: B/surface csg - T.D.
Formation Density Log: B/surface csg - T.D.

Coring Program:

Conventional Diamond Cores:
(1) One 50' core in Desert Creek Zone if shows are encountered in samples.
(2) One 50' core in top of Mississippian. Porosity
Sidewall Cores: Sidewall cores will be utilized for evaluation of the White Rim and Cedar Mesa Sands.

Testing Program:

Conventional Drill Stem Tests: DST's may be used for further evaluation in the event oil shows are found.

Anticipated Formation Tops:

Permian	White Rim Ss.	100 (+4262)
	Organ Rock Sh.	400 (+3962)
	Cedar Mesa	520 (+3842)
	Wolfcamp Carbonates	770 (+3592)
Pennsylvanian	Ismay	2170(+2192)
	Desert Creek	2350 (+2012)
	Paradox Salt	2630 (+1732)
	B/Paradox Salt	3430 (+932)
	Molas	3780 (+582)
Mississippian		3860 (+502)

Parties to be Notified: The following Placid personnel should be called if any Porosity zones and/or shows are encountered.

Jim Murphree - Denver, Colorado 892-6191 (off.) or 986-1891 (home) or
Bill Biskamp - Dallas, Texas 741-3081 (off.) or 691-5947 (Home)

Mr. Frank Tully will be supplied with daily drilling reports and copies of all data from the well. His address is: 500 Dahlia, Denver, Colo. Phone - 377-1808

Should it be necessary to plug and abandon this well, call one of the following for plugging instructions and approval:

Paul W. Burchell
Salt Lake City, Utah
277-2890 (home)
328-5771 (off.)

or

Cleon B. Feight
Salt Lake City, Utah
466-4455 (home)

By: James D. Murphree
James D. Murphree
Date: August 19, 1970

Form 9-331 C
(May 1963)

RECEIVED
BR. OF OIL & GAS OPERATIONS
AUG 7 1970
U.S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: PLACID OIL COMPANY

3. ADDRESS OF OPERATOR: 430 Columbine Building, Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
[illegible] (900' FNL & 1145' FWL) of Section 27, T28S-R17E

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ——

7. UNIT AGREEMENT NAME: ——

8. FARM OR LEASE NAME: U.S.A.

9. WELL NO.: No. DU-1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA:

Attention: James D. Murphree

You are urged to contact the District Manager, Bureau of Land Management, Price District Office, 900 N. 7th East, P.O. Box AB, Price, Ut. 84501 PHONE: 637-1371 prior to commencing any access road or air strip construction in connection with this drilling operation which may be on or cross public lands under the administration of the Bureau of Land Management.

Propose to drill an exploratory test to the Mississippian

1. **Primary Objective: Pennsylvanian "Desert Creek" formation**
2. **Minimum mud program: 9# fresh water mud to 2700', 10# salt saturated mud to T.D.**
3. **Will install and test blowout preventer equipment**
4. **Blowout preventers will be given daily operational tests and each test logged**
5. **Will drill a 8 3/4" hole from base surface casing to T.D.**
6. **If commercial production is indicated, will run 5½", 15.5#, J-55 casing and set with 350 sx**

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED James D. Murphree TITLE District Geologist DATE July 30, 1970
James D. Murphree

(This space for Federal or State office use)

PERMIT NO. ——— APPROVAL DATE AUG 18 1970

Original signed by:
APPROVED BY Bernard Moroz TITLE Acting District Engineer DATE AUG 18 1970

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

SUBJECT TO ATTACHED CONDITIONS

Form 9-331 C
(May 1963)

RECEIVED
BR. OF OIL & GAS OPERATIONS
AUG 7 1970
U.S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

SUBMIT IN T ICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: PLACID OIL COMPANY

3. ADDRESS OF OPERATOR: 430 Columbine Building, Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: NW NW (820' FNL & 1145' FWL) of Section 27, T28S-R17E
At proposed prod. zone: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 70 Miles NE of Hite, Utah

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ----------

7. UNIT AGREEMENT NAME: ----------

8. FARM OR LEASE NAME: U.S.A.

9. WELL NO.: No. DU-1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 27, T28S-R17E

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 820'

16. NO. OF ACRES IN LEASE: 1920.00

17. NO. OF ACRES ASSIGNED TO THIS WELL: 80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: ----------

19. PROPOSED DEPTH: 4500'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4352' G.L.

22. APPROX. DATE WORK WILL START*: September 1, 1970

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12¼"	9 5/8"	36#	500'	Cement to surface

Propose to drill an exploratory test to the Mississippian

1. Primary Objective: Pennsylvanian "Desert Creek" formation
2. Minimum mud program: 9# fresh water mud to 2700', 10# salt saturated mud to T.D.
3. Will install and test blowout preventer equipment
4. Blowout preventers will be given daily operational tests and each test logged
5. Will drill a 8 3/4" hole from base surface casing to T.D.
6. If commercial production is indicated, will run 5½", 15.5#, J-55 casing and set with 350 sx

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED James D. Murphree TITLE District Geologist DATE July 30, 1970
James D. Murphree

(This space for Federal or State office use)

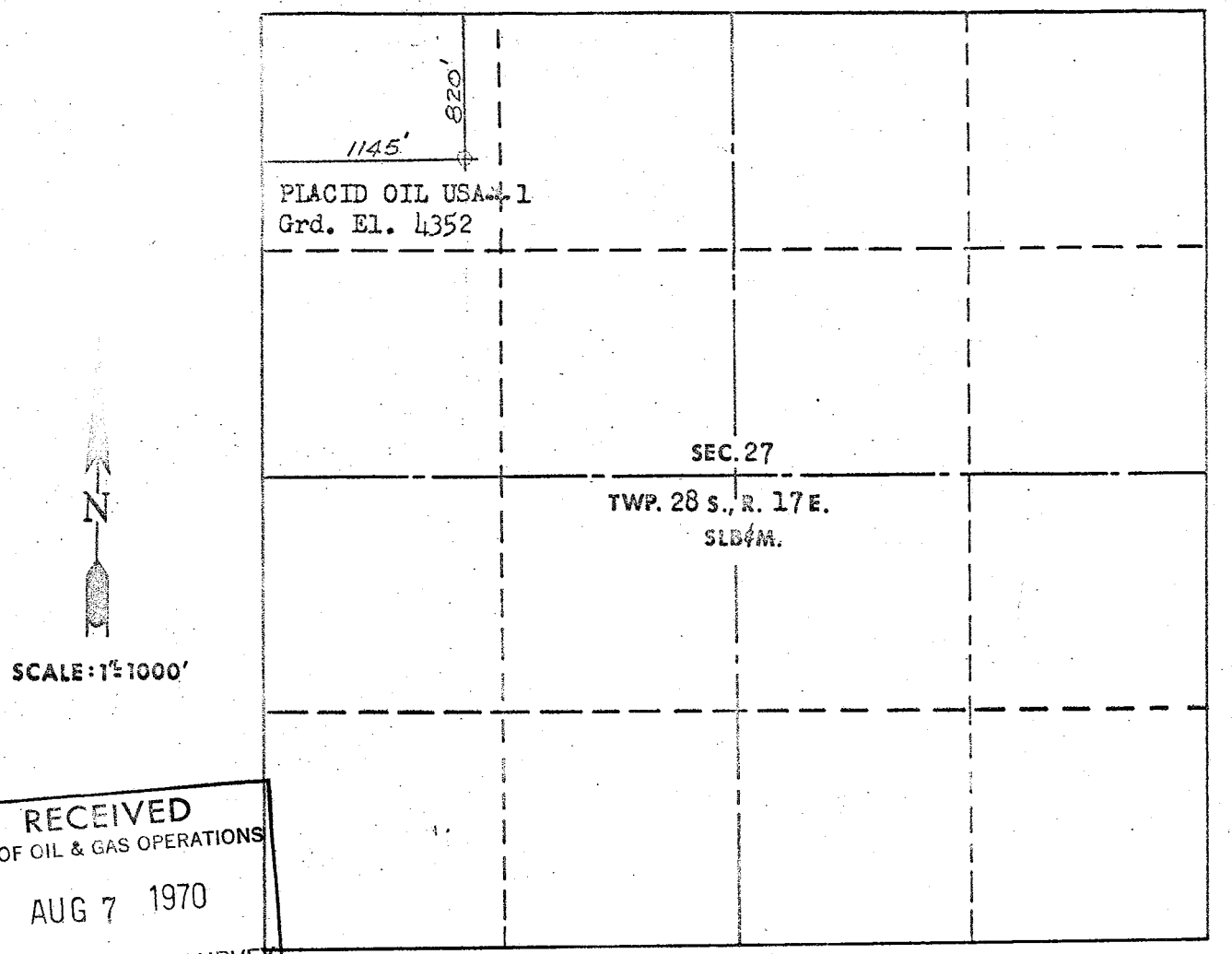
PERMIT NO. ---------- APPROVAL DATE AUG 18 1970

Original signed by:
APPROVED BY Bernard Moroz TITLE Acting District Engineer DATE AUG 18 1970

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

SUBJECT TO ATTACHED CONDITIONS



RECEIVED
BR. OF OIL & GAS OPERATIONS
AUG 7 1970
U. S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

SURVEYORS CERTIFICATE

I, GEORGE H. NEWELL A REGISTERED LAND SURVEYOR AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH, HOLDING LICENSE NO. 1770, CERTIFY THAT THIS PLAT OF:

PLACID OIL USA-1

AND MORE SPECIFICALLY DESCRIBED AS FOLLOWS:

820 FEET FROM THE NORTH LINE AND 1145 FEET FROM THE WEST LINE OF SECTION 27, T. 28 S., R. 17 E., SLB&M. GROUND LINE ELEVATION 4352.

IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE June 16, 1970

George H. Newell
GEORGE H. NEWELL

Form 9-1123
(Rev. Dec. 1957)

(Submit in triplicate to appropriate
Regional Oil and Gas or Mining Supervisor)

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Salt Lake City, Utah
SERIAL NO.: Utah 0145781

RECEIVED
BR. OF OIL & GAS OPERATIONS
AUG 7 1970
U. S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

and hereby designates

NAME: Placid Oil Company
ADDRESS: 430 Columbine Building
Denver, Colorado 80203

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Wayne County, Utah

Township 28 South, Range 17 East
Section 27: All

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

(Signature of lessee)

F. M. Tully
500 Dahlia Street
Denver, Colorado 80220
(Address)

August 5, 1970
(Date)

U. S. GOVERNMENT PRINTING OFFICE 16—53598-3

Conditions of Approval

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the lease terms and the operating regulations, 30 CFR 221. The following items are emphasized:

1. There shall be no material deviation from the proposed drilling and/or workover program as approved. Safe drilling and operating practices must be observed in regard to equipment and personnel. The use and frequent testing of blowout prevention equipment is mandatory. All wells, whether drilling, producing, suspended or abandoned, shall be identified in accordance with 30 CFR 221.22. Any changes in operations must have prior approval of this office.

2. All shows of fresh water and minerals will be reported and protected. All oil and gas shows will be adequately tested for commercial possibilities, reported and protected.

3. No location will be made or moved, no well will be plugged and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of this office.

4. "Well Completion or Recompletion Report and Log" (form 9-330) will be submitted not later than 15 days after completion of the wall or after completion of operations being performed, in accordance with 30 CFR 221.59. Two [redacted] copies of all logs run, core descriptions, core analyses, well test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover and/or completion operations, will be filed with form 9-330. Samples (cuttings, fluid and/or gas) will be submitted only when requested by this office.

5. "Sundry Notices and Reports on Wells" (form 9-331) will be filed for all changes of plans and other operations in accordance with 30 CFR 221.58. Emergency approval may be obtained verbally, but such approval does not waive the written report requirement.

6. Other: _____

7. The U. S. Geological Survey district office address is:
   8416 Federal Building
   Salt Lake City, Utah 84111 Phone 524-5650 (area code 801)
   Dist. Engr. _____ Phone _____
   Asst. Engr. _____ Phone _____

12/68

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Branch of Oil and Gas Operations
8416 Federal Building
Salt Lake City, Utah 84111

August 18, 1970

Placid Oil Company
430 Columbine Building
Denver, Colorado 80203

Attention: James D. Murphree

Gentlemen:

Attached is an approved copy of your permit to drill U.S.A. #1 well in the NW¼NW¼ sec. 27, T. 28 S., R. 17 E., Wayne County, Utah, on oil and gas lease Utah 0145781.

We would appreciate your keeping us currently informed on the status of operations by furnishing daily, weekly or periodic (at least monthly) status reports. All information so received will be held strictly confidential upon request.

The above information will be required on all future wildcat wells in this District and your cooperation in furnishing this information will be greatly appreciated.

Sincerely yours,

Bernard Moroz

Bernard Moroz
Acting District Engineer

Attachment

File in Well File

CALVIN L. RAMPTON
Governor

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL & GAS CONSERVATION

1588 WEST NORTH TEMPLE
SALT LAKE CITY, UTAH 84116
328-5771

OIL & GAS CONSERVATION BOARD

DELBERT M. DRAPER, JR.
Chairman

CHARLES R. HENDERSON
ROBERT R. NORMAN
WALLACE D. YARDLEY
WESLEY R. DICKERSON

August 5, 1970

Placid Oil Company
430 Columbine Building
Denver, Colorado 80203

Re: DU-1, USA #1
Sec. 27, T. 28 S, R. 17 E,
Wayne County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well on said unorthodox location is hereby granted in accordance with Rule C-3(c).

Should you determine that it will be necessary for you to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL-Chief Petroleum Engineer
HOME: 277-2890
or
CLEON B. FEIGHT-Director
HOME: 466-4455
OFFICE: 328-5771

This approval terminates within 90 days if the well has not been spudded-in within said period.

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. The API number of this well is 43-055-30009.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

Cleon B. Feight

CLEON B. FEIGHT
DIRECTOR

CBF:sd
cc: U.S. Geological Survey

Well File

August 5, 1970

United States Geological Survey
8416 Federal Building
125 South State Street
Salt Lake City, Utah, 84111

Re: Placid Oil Company's
No. DU-1 U.S.A.
Utah 0145781
Wayne County, Utah

Gentlemen:

Attached are the following in connection with our Application to Drill the captioned well:

1. Applications
2. Location Plats
3. Designations of Operator

We would appreciate your approval at your earliest convenience.

Yours truly,

PLACID OIL COMPANY

James D. Murphree

JDM/ds

Attachments

SUBMIT IN T[illegible]ICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
PLACID OIL COMPANY

3. ADDRESS OF OPERATOR
430 Columbine Building, Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
NW NW (820' FNL & 1145' FWL) of Section 27, T28S-R17E
At proposed prod. zone
Same

5. LEASE DESIGNATION AND SERIAL NO.
Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
---

7. UNIT AGREEMENT NAME
---

8. FARM OR LEASE NAME
U.S.A.

9. WELL NO.
No. DU-1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 27, T28S-R17E

12. COUNTY OR PARISH
Wayne

13. STATE
Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
70 Miles NE of Hite, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 820'

16. NO. OF ACRES IN LEASE
1920.00

17. NO. OF ACRES ASSIGNED TO THIS WELL
80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
---

19. PROPOSED DEPTH
4500'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
4352' G.L.

22. APPROX. DATE WORK WILL START*
September 1, 1970

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12¼"	9 5/8"	36#	500'	Cement to surface

Propose to drill an exploratory test to the Mississippian

1. Primary Objective: Pennsylvanian "Desert Creek" formation
2. Minimum mud program: 9# fresh water mud to 2700', 10# salt saturated mud to T.D.
3. Will install and test blowout preventer equipment
4. Blowout preventers will be given daily operational tests and each test logged
5. Will drill a 8 3/4" hole from base surface casing to T.D.
6. If commercial production is indicated, will run 5½", 15.5#, J-55 casing and set with 350 sx

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED James D. Murphree TITLE District Geologist DATE July 30, 1970
James D. Murphree

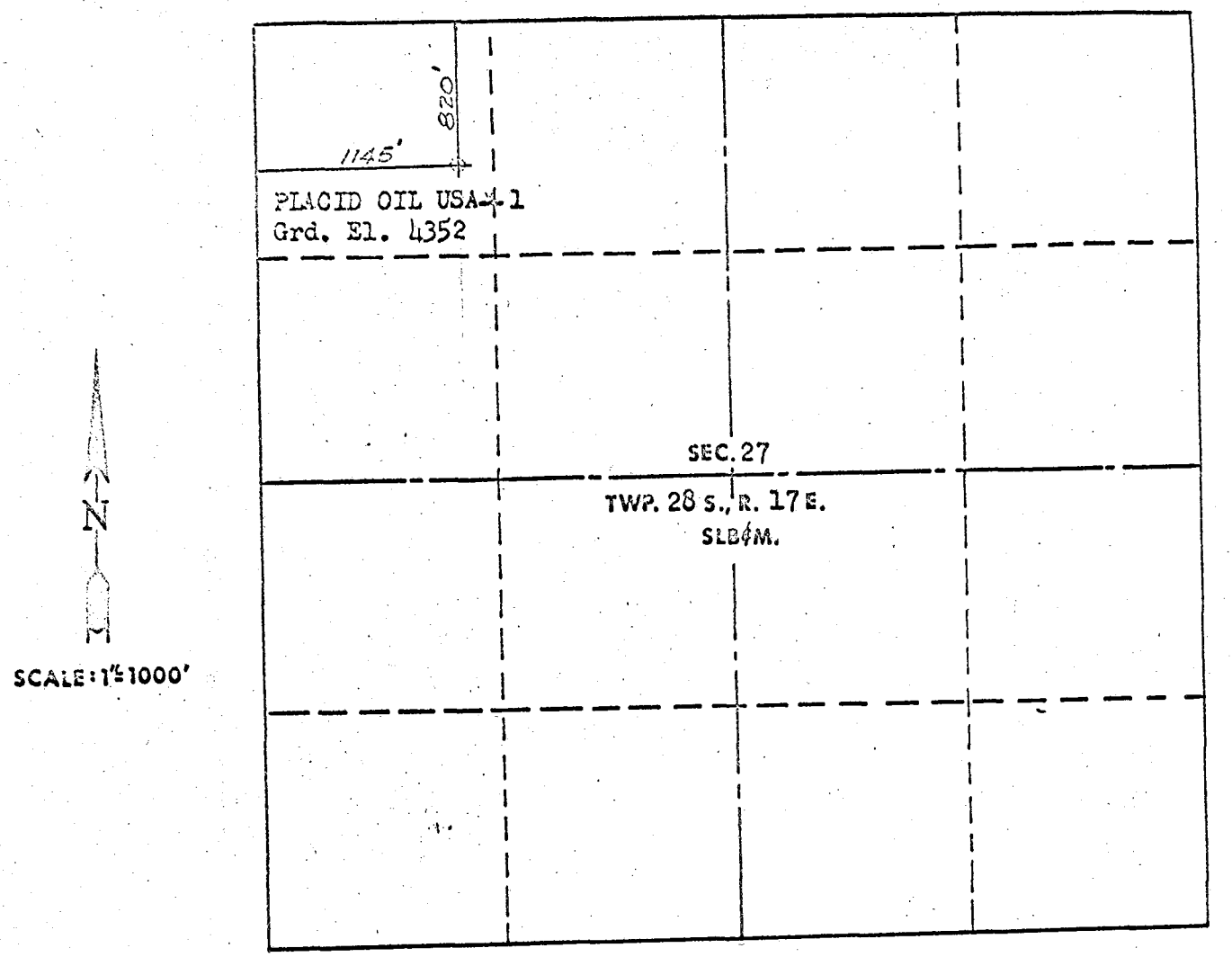
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



SURVEYORS CERTIFICATE

I, GEORGE H. NEWELL A REGISTERED LAND SURVEYOR AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH, HOLDING LICENSE NO. 1770, CERTIFY THAT THIS PLAT OF:

PLACID OIL USA-1

AND MORE SPECIFICALLY DESCRIBED AS FOLLOWS:

820 FEET FROM THE NORTH LINE AND 1145 FEET FROM THE WEST LINE OF SECTION 27, T. 28 S., R. 17 E., SLB&M. GROUND LINE ELEVATION 4352.

IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE June 16, 1970

George H. Newell

GEORGE H. NEWELL

Form 9-1123
(Nov. Dec. 1967)

(Submit in triplicate to appropriate
Regional Oil and Gas or Mining Supervisor)

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Salt Lake City, Utah
SERIAL NO.: Utah 0145781

and hereby designates

NAME: Placid Oil Company
ADDRESS: 430 Columbine Building
Denver, Colorado 80203

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Wayne County, Utah

Township 28 South, Range 17 East
Section 27: All

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

(Signature of lessee)
F. M. Tully
500 Dahlia Street
Denver, Colorado 80220
(Address)

August 5, 1970
(Date)

U. S. GOVERNMENT PRINTING OFFICE 16—53598-3

July 30, 1970

Oil and Gas Conservation Commission
of the State of Utah
1588 West North Temple
Salt Lake City, Utah

Re: Placid Oil Company's
No. DU-1 U.S.A.
Utah 0145781
Wayne County, Utah

Gentlemen:

Attached are the following in connection with our Application to Drill the captioned well:

1. Applications
2. Location Plats

We would appreciate your approval at your earliest convenience.

Yours truly,

PLACID OIL COMPANY

James D. Murphree

JDM/ds

Attachments

(State requires only a copy of the U.S.G.S. form. There is no application fee - DS)

George H. Newell

ph. 253-0661
Box 356
Moab, Utah 84532

June 16, 1970

Placid Oil Company
P. O. Box 328
Good Pine, Louisanna 71337

Attn: Bob Grey

Dear Mr. Grey,

Attached hereto is a copy of Surveyors Certificate of location of Placid Oil USA - 1 which you asked me to stake.

As per your instructions I am mailing ten (10) copies to your Denver office and one (1) copy to your Miles City office.

Yours truly,

George H. Newell

cc: Placid Oil Company
430 Columbine Bldg.
1845 Sherman St.
Denver, Colo. 80203

Placid Oil Company
P. O. Box 1278
Miles City, Montana 59301

COPY

CORE ANALYSIS RESULTS FOR

PLACID OIL COMPANY

NO. 1 DU-USA WELL

WILDCAT

WAYNE COUNTY, UTAH

CORE

CA-20

Well File

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS RESULTS

Company Placid Oil Company | Formation Mississippian | File RP-3-2436
Well USA # DU-1 | Core Type Dia. Conv. 4" | Date Report 9-23-70
Field Wildcat | Drilling Fluid Sat Salt Sol. | Analysts Mohl
County Wayne | State Utah | Elev. 4352 GL | Location NW NW Sec 27 - T 28S - R 17E

Lithological Abbreviations

SAND-SD, SHALE-SH, LIME-LM, DOLOMITE-DOL, CHERT-CH, GYPSUM-GYP, ANHYDRITE-ANHY, CONGLOMERATE-CONG, FOSSILIFEROUS-FOSS, SANDY-SDY, SHALY-SHY, LIMY-LMY, FINE-FN, MEDIUM-MED, COARSE-CSE, CRYSTALLINE-XLN, GRAIN-GRN, GRANULAR-GRNL, BROWN-BRN, GRAY-GY, VUGGY-VGY, FRACTURED-FRAC, LAMINATION-LAM, STYLOLITIC-STY, SLIGHTLY-SL/, VERY-V/, WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE: OIL	RESIDUAL SATURATION PER CENT PORE: TOTAL WATER	SAMPLE DESCRIPTION AND REMARKS
1	4793-94	0.10	9.9	0.0	81.8	Dolo, wh, suc, vgy, sl calc, vert frac
2	4794-95	55.	12.2	0.0	83.5	Dolo, wh, suc, vgy, sl calc, vert frac
3	4795-96	0.05	11.1	0.0	83.6	Dolo, wh, suc, vgy, sl calc, vert frac
4	4796-97	0.52	10.0	0.0	83.0	Dolo, wh, suc, vgy, sl calc, vert frac
5	4797-98	0.11	9.8	0.0	82.6	Dolo, wh, suc, vgy, sl calc, vert frac
6	4798-99	0.08	6.1	0.0	70.5	Dolo, wh, suc, vgy, sl calc, vert frac
7	4801-02	0.04	6.8	0.0	69.1	Dolo, gry, suc, vgy, sl calc vert frac
8	4802-03	0.50	11.7	0.0	87.1	Dolo, gry, suc, vgy, sl calc, vert frac
9	4803-04	29.	10.1	0.0	77.1	Dolo, wh, suc, vgy, sl calc, vert frac
10	4804-05	0.11	12.0	0.0	80.0	Dolo, wh, suc, vgy, sl calc, vert frac
11	4805-06	0.30	9.3	0.0	77.4	Dolo, wh, suc, vgy, sl calc, vert frac
12	4806-07	40.	11.4	0.0	75.3	Dolo, wh, suc, vgy, sl calc, vert frac
13	4807-08	0.62	11.8	0.0	86.5	Dolo, wh, suc, vgy, sl calc, vert frac
14	4808-09	62.	16.1	0.0	88.1	Dolo, wh, suc, vgy, sl calc, vert frac
15	4809-10	4.8	12.8	0.0	82.9	Dolo, wh, suc, vgy, sl calc, vert frac

These analyses, opinons or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CA-20

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS RESULTS

Company Placid Oil Company | Formation Mississippian | File RP-3-2436
Well USA # DU-1 | Core Type Dia. Conv. 4" | Date Report 9-23-70
Field Wildcat | Drilling Fluid Sat Salt Sol. | Analysts Mohl
County Wayne | State Utah | Elev. 4352 GL | Location NW NW Sec 27 - T 28S - R 17E

Lithological Abbreviations

SAND-SD, SHALE-SH, LIME-LM, DOLOMITE-DOL, CHERT-CH, GYPSUM-GYP, ANHYDRITE-ANHY, CONGLOMERATE-CONG, FOSSILIFEROUS-FOSS, SANDY-SDY, SHALY-SHY, LIMY-LMY, FINE-FN, MEDIUM-MED, COARSE-CSE, CRYSTALLINE-XLN, GRAIN-GRN, GRANULAR-GRNL, BROWN-BRN, GRAY-GY, VUGGY-VGY, FRACTURED-FRAC, LAMINATION-LAM, STYLOLITIC-STY, SLIGHTLY-SL/, VERY-V/, WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE: OIL	RESIDUAL SATURATION PER CENT PORE: TOTAL WATER	SAMPLE DESCRIPTION AND REMARKS
1	4793-94	0.10	9.9	0.0	81.8	Dolo, wh, suc, vgy, sl calc, vert frac
2	4794-95	55.	12.2	0.0	83.5	Dolo, wh, suc, vgy, sl calc, vert frac
3	4795-96	0.05	11.1	0.0	83.6	Dolo, wh, suc, vgy, sl calc, vert frac
4	4796-97	0.52	10.0	0.0	83.0	Dolo, wh, suc, vgy, sl calc, vert frac
5	4797-98	0.11	9.8	0.0	82.6	Dolo, wh, suc, vgy, sl calc, vert frac
6	4798-99	0.08	6.1	0.0	70.5	Dolo, wh, suc, vgy, sl calc, vert frac
7	4801-02	0.04	6.8	0.0	69.1	Dolo, gry, suc, vgy, sl calc vert frac
8	4802-03	0.50	11.7	0.0	87.1	Dolo, gry, suc, vgy, sl calc, vert frac
9	4803-04	29.	10.1	0.0	77.1	Dolo, wh, suc, vgy, sl calc, vert frac
10	4804-05	0.11	12.0	0.0	80.0	Dolo, wh, suc, vgy, sl calc, vert frac
11	4805-06	0.30	9.3	0.0	77.4	Dolo, wh, suc, vgy, sl calc, vert frac
12	4806-07	40.	11.4	0.0	75.3	Dolo, wh, suc, vgy, sl calc, vert frac
13	4807-08	0.62	11.8	0.0	86.5	Dolo, wh, suc, vgy, sl calc, vert frac
14	4808-09	62.	16.1	0.0	88.1	Dolo, wh, suc, vgy, sl calc, vert frac
15	4809-10	4.8	12.8	0.0	82.9	Dolo, wh, suc, vgy, sl calc, vert frac
16	4812-13	0.65	9.6			
17	4816-17	0.28	2.9			
18	4818-19	0.02	2.0			
19	4822-23	0.29	3.9			
20	4826-27	0.10	6.8			
21	4830-31	5.4	6.8			
22	4833-34	52. *	2.5			* Denotes fracture permeability
23	4837-38	4.2	12.4			
24	4839-40	0.48	19.0			
25	4841-42	0.75	11.5			

These analyses, opinons or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations,

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER Dry Hole

2. NAME OF OPERATOR
Placid Oil Company

3. ADDRESS OF OPERATOR
2008 United Bank Center, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
NW NW (820' FNL & 1145' FWL) of Section 27, T28S - R17E

5. LEASE DESIGNATION AND SERIAL NO.
Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
—

7. UNIT AGREEMENT NAME
—

8. FARM OR LEASE NAME
U.S.A.

9. WELL NO.
DU-1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 27, T28S-R17E

12. COUNTY OR PARISH
Wayne

13. STATE
Utah

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4352' G.L.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐
REPAIR WELL	☐	CHANGE PLANS	☐
(Other)			

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	☐
FRACTURE TREATMENT	☐
SHOOTING OR ACIDIZING	☐
(Other)	

REPAIRING WELL ☐
ALTERING CASING ☐
ABANDONMENT* XX

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Plugged and Abandoned on 9-25-70 as Follows:

4562-4464 w/35 sks.
2741-2643 w/35 sks.
920- 822 w/35 sks.
545- 409 w/50 sks.
10 sacks in top of casing.

Installed Dry Hole Marker

18. I hereby certify that the foregoing is true and correct
SIGNED James D. Murphree TITLE District Geologist DATE 9-28-70
James D. Murphree

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
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SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER Dry Hole

2. NAME OF OPERATOR
Placid Oil Company

3. ADDRESS OF OPERATOR
2008 United Bank Center, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
NW NW (820' FNL & 1145' FWL) of Section 27, T28S - R17E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4352' G.L.

5. LEASE DESIGNATION AND SERIAL NO.
Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
—

7. UNIT AGREEMENT NAME
—

8. FARM OR LEASE NAME
U.S.A.

9. WELL NO.
DU-1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 27, T28S-R17E

12. COUNTY OR PARISH
Wayne

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☒
REPAIR WELL	☐	CHANGE PLANS	☐
(Other)			

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	☐
FRACTURE TREATMENT	☐
SHOOTING OR ACIDIZING	☐
(Other)	

REPAIRING WELL
ALTERING CASING
ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Verbal Approval was given on 24 September 1970, by Mr. Jerry Daniel for the following plugging procedures.

4562'-4464' w/35 sacks; 2741'-2643' w/35 sacks; 920'-822' w/35 sacks; 545'-409' w/50 sacks; 10 sacks in top, and install dry hold marker.

18. I hereby certify that the foregoing is true and correct

SIGNED James D. Murphree TITLE District Geologist DATE 9-28-70
James D. Murphree

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
(Rev. 5 68)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Placid Oil Company

3. ADDRESS OF OPERATOR: 2008 United Bank Center, Denver, Colorado 80202

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 820' FNL & 1145' FWL of Section 27, T28S-R17E
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ——
7. UNIT AGREEMENT NAME: ——
8. FARM OR LEASE NAME: U.S.A.
9. WELL NO.: DU-1
10. FIELD AND POOL, OR WILDCAT: Wildcat
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 27, T28S-R17E
12. COUNTY OR PARISH: Wayne
13. STATE: Utah

14. PERMIT NO.: —— DATE ISSUED: 8-18-70

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
8-24-70	8-23-70		4352' G.L.	4352

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5075'		N/A	→	0-5075'	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

25. WAS DIRECTIONAL SURVEY MADE: Yes-2 3/4°

26. TYPE ELECTRIC AND OTHER LOGS RUN: Sidewall Neutron, Continuous Dip Meter, Laterlog - Formation Density Log

27. WAS WELL CORED: 49' Core

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#	549'	13 3/4"	480 sks CL-A, 2% c.c.	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→				

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED James D. Murphree TITLE District Geologist DATE 9-28-70
James D. Murphree

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
White Rim Sand	80	350	Sandstone-wh, clear, vfg., calc, v. silty in part, good porosity & Permeability, fresh water bearing
Mississippian	4782	5075 (TD)	Dolomite -Cream-tan, vuggy, crinoid molds, good porosity & permeability, dead oil stain - water bearing

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
White Rim	80'	Same
Cutler	500'	
Wolfcamp		
Carbonates	1090'	
Upper Hermosa	1580'	
Ismay	2467'	
First Paradox Salt	2740'	
Desert Creek	2825'	
B/Paradox Salt	4090'	
Mississippian	4562'	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636
837-497

871-233

28S
17E
C 27

POC NO. DU-1 USA

T 28S R 17E SEC 27

PLACID OIL COMPANY
WELL: USA 1
WAYNE COUNTY, UTAH
API # 43-055-30009

USA 1

DIPMETER INTERPRETATION

T 28S
R

D.F. 4361

GEOLOGICAL FIELD SHEET

STATE & COUNTY Utah, Wayne G.L. ELEV. 4352

OPERATOR Placid Oil Company

FEE OWNER U.S.A. #D-U-1

LOCATION 820' FNL & 1145' FWL. SURVEY SEC.-TWP.-RNG 27-T28S-R17E

Spudded: 5 A.M. 8-24-70 BEG.: Rig Rel: 2:30 P.M. 9-25-70 COMP.:

CASING RECORD

8-26-70 Jts. 18 Size 9 5/8 Footage 555.94 Set @ 549'
Wt. 36# Cemented with 480 sks Class A, 2% C.C. Plug down
at 7:15 P. M. 25th

COMPLETION RECORD

9-26-70 Plugs at: 4562-4464 w/35 sks; 2741-2643 w/35 sks;
920-822 w/35 sks; 545-409 w/50 sks; 10 sks in top, Installed
Dry Hole Marker.

TOPS

SAMPLE	SCHLUMBERGER

7/30/70 Prepared USGS and Sundry Permits (Permits Approved)
8/21/70 Prepared and distributed prognosis
8/24/70 Approved permits distributed
9/29/70 Prepared and Distributed Completion Reports

MISCELLANEOUS INFORMATION

8-23-70 Rig up and Wtg on H_2O truck till 7 A.M.
8-24-70 Report at 6:00 A.M. 25' & Drlg. Formation:
Sandstone
8-25-70 Report at 6:00 A.M. 420 Formation: Sa & Sh
M. 9.0 V. 35 Straight Hole Test 105-½° 304-1½°
Bit N. 1 Made 420 Ft. in 24½ Hrs.
8-26-70 Report at 6:00 A.M. 549' waiting on cement
Formation: Sa & Sh Straight Hole Test 549'-½°
Bit No. 1 Size 13 3/4osc3 (Hughes) in @ 0 Made 549 Ft. in
30¼ Hrs.
8-27-70 Report at 6:00 A.M. 885' Formation: Sa and Sh
M. 9.0 V. 38 W.L. 8.2 pH 12 C. 2/32
Bit No. 2 Size 8 3/4 Made 340 Ft. in 10½ Hrs.
Hrs. Drlt. Footage 340' - tst pipe and blow out
preventers @ 1000# - test O.K.
8-28-70 Report at 6 A.M. 1187' & Drlg. Formation: Sh, Lime,
Sd. M. 9.2 V. 38 W.L. 8. pH 12 C. 2/32 Straight Hole Test
(totco) 962-½° 1185-¼° Bit No. 2 Made 417 Ft in 13 ¼ Hrs
Bit No. 3 Made 223 Ft. in 16 3/4 Hrs. Bit No. 4-2' in 3/4 Hrs.

FORM 511—SCOUT REPORT
THE M. L. BATH COMPANIES SHREVEPORT—LONGVIEW—LAKE CHARLES
BATH-GRAM REG. NO. 612,391 U. S. PAT. OFF.

WELL LOG_____

BOTTOM	FORMATION	BOTTOM	FORMATION	BOTTOM	FORMATION

8-29-70 Report at 6 A.M. 1444' Formation: Lime & Chert
M. 9.1 V. 36 W.L. 7.2 C. 1/32 Sand ½%
Straight Hole Test: totco 1382' ½°

Bit Nol 4 Made 197 Ft. in 18 Hrs. Bit No. 5 Type X55R
Made 62 Ft. in 5 ¼ Hrs.

8-30-70 Report at 6 A.M. 1688'
Formation: Lime M. 9.1 V. 37 W.L. 8 Ph 12 C. 2/32
Bit No. 5 Made 306 Ft. in 29 Hrs.

8-31-70 Report at 6 A.M. 1913' Formation: lime
M. 9.1 V. 38 W.L. 80 pH 12 C. 2/32
Bit No. 5 Made 531 Ft. in 53 Hrs.

9-1-70 Report at 6 A.M. 2062' Formation: Sand and Lime M.9.1
V. 37 W.L. 6 pH 11.5 C. 2/32 totco 1994' ¼°

Bit No. 5 Made 612 Ft. in 64½ Hrs. Bit No. 6 type X55R
Made 58 Ft. in 9¼ Hrs.

9-2-70 Report at 6 A.M. 2220' and drlg Formation: Sand & Lime
M. 9.1, V. 35, W.L. 8, pH 12, C. 2/32
Bit No. 6 Size 8 3/4 (X55R) Made 226 Ft. in 33¼ Hrs

9-3-70 Report at 6 A.M. 2352' & drlg. Formation: Lime and
Sand M. 9.2, V. 36, W.L. 6.6, pH 11.5, C. 2/32
Bit No. 6 Made 358 Ft. in 57¼ Hrs.

9-4-70 Report at 6 A.M. 2482' & drlg, Formation: Lime, Sand,
Shale, M. 9.2, V. 36, W.L. 6.2, pH 11.5, C. 2/32, Sand ½%
Bit No. 6 Type X55R made 488' in 81¼ Hrs.

9-5-70 Report at 6 A.M. 2606', Formation: Lime and Sand,
M. 9.2 V. 36, W.L. 6.3, pH 11.5, C. 2/32, Bit No. 6 Type X55R
Made 612 Ft. in 105¼ Hrs.

9-6-70 Report at 6 A.M. 2710 Drlg, Formation: Sand, Lime,
Chert, Anhydrite, M. 9.2, V. 40, W.L. 6.3, pH 11, C. 2/32
Bit No. 6 Made 716 Ft. in 129¼ Hrs.

9-7-70 Report at 6 A.M. 2772', Formation: Salt, M., 10, V. 34,
Straight Hole Test 2725' ¼°, Bit No. 6 Made 731 Ft. in 132 3/4
Hrs. Bit No. 7 Type X55R made 21' in 2½ Hrs. Bit No. 8 →

Size XC Made 26 Ft. in 5½ Hrs.

9-8-70 Report at 6 A.M. 2923' Drlg, Formation: Lime Anhydrite, Salt, M. 9.8, V. 37, W.L. 5.6, pH 7, C. 1/32

Bit No. 8 Size XC Made 177 Ft. in 29 Hrs.

9-9-70 Report at 6 A.M. 3170' & Drlg, Formation: Salt and Shells M. 10.1, V. 36, W.L. 5.3, pH 7.6, C. 1/32

Straight Hole Test 2993' 3/4°, Bit No. 8 Size 8 3/4 XC Made 247 Ft. in 40 Hrs., Bit No. 9 Size 8 3/4 XC Made 177 Ft. in 9¼ Hrs.

9-10-70 Report at 6 A.M. 3477' & Drlg, Formation: Salt Anhydrite, M. 9.9, V. 36, W.L. 3.6, pH 7, C. 1/32

Bit No. 9 Size XC Made 404 Ft. in 32 3/4 Hrs.

Top of massive salt 2980

9-11-70 Report at 6 A.M. 3777' Drlg, Formation : Salt & Anhydrite, M. 10.1, V. 37, W.L. 3.4, pH 7, C. 1/32

Straight Hole Test 3574-3 3/4°, Bit No. 9 Size XC Made 581 Ft. in 38¼ Hrs., Bit No. 10 Size ODZ Made 203 Ft. in 15 3/4 Hrs.

9-12-70 Report at 6 A.M. 3923' drlg, Formation: Sand & Anhydrite, M. 10.2, V. 38, W.L. 3, pH 7, C. 1/32

Straight Hole Test 3783-4 3/4°, 3908-5°, Bit No. 10 Made 209 Ft. in 17 Hrs, Bit No. 11 Size X55R Made 125 Ft. in 15¼ Hrs., Bit No. 12 Size WD7 Made 15 Ft in 2 Hrs.

9-13-70 Report at 6 A.M. 4104 drlg, Formation: Sand, Shale, Salt, M. 10.1, V. 39, W.L. 6, pH 7, C 2/32
Bit No. 12 Made 196 Ft. in 26 Hrs.

9-14-70 Report at 6 A.M. 4185 drlg, Formation: Lime, Anhydrite, Dolemite, M. 10.2, V. 38, W.L. 6, pH 7, C. 2/32

Straight Hole Test 4108-5°, Bit No. 12 Made 200 Ft. in 27 3/4 Hrs., Bit No. 13 Size XC Made 77 Ft. in 19½Hrs.

9-15-70 Report at 6 A.M. 4260 Drlg, Formation: Lime, Dolemite, M. 10.2, V. 38, Bit No. 13 Made 100 Ft in 27 Hrs.

Bit No. 14 Size XDV Made 52 Ft. in 13¼ Hrs.

9-16-70 Report at 6 A.M. 4355' drlg, Formation: Lime, Chert, M. 10.2, V. 36, W.L. 5, pH 7, C. 2/32, Straight Hole Test 4311-4 3/4°, Bit No. 14 Made 103 Ft. in 27 Hrs. Bit No. 15 Size 8 3/4 WD7 Made 44 Ft. in 7 3/4 Hrs.

9-17-70 Report at 6 A.M. 4425 drlg, Formation: Lime, M. 10.3, V. 37, W.L. 5, pH 7, C. 2/32, Straight Hole Test 4412-4°, Bit No. 15 Size WD7 8 3/4 Made 101 Ft. in 23 3/4 Hrs., Bit No. 16 Size J44 8 3/4 Made 13 Ft. in 4½ Hrs.

9-18-70 Report at 6 A.M. 4511 drlg, Formation: Lime and Shale, M. 10.3, V. 38, W.L. 5, pH 7, C. 2/32 Bit No. 16 Made 99 Ft. in 27½ Hrs.

*9-20-70 Report at 6 A.M. 4683 drlg, Formation: Lime and Shale, M. 10.3, V. 37, WL 4, pH 7, C. 2/32, Bit No. 16 Size J44 Made 271 Ft. in 74 3/4 Hrs., 45-72 Miss.

9-21-70 Report at 6 A.M. 4762', Formation: Lime, M. 10.2, V. 39, W.L. 4, pH 7, C. 2/32, Bit No. 16 Size J44 Made 350 Ft. in 98½ Hrs.

*9-19-70 Report at 6 A.M. 4606 drlg, Formation: Lime and Red Shale, M. 10.2, V. 37, W.L. 4, pH 7, C. 2/32, Bit No. 16 Made 194 ft. in 51¼ Hrs.

9-22-70 Report at 6 A.M. 4810, Formation: Lime, M. 10.2, V. 38, Straight Hole Test 4793-2 3/4°, Bit No. 16 Made 381 Ft. in 105¼ Hrs. Bit No. 17, 8 3/32 (Christensen Diamond Corebit) Made 7 Ft. in 7½ Hrs.

9-23-70 Report at 6 A.M. 4940 drlg and waiting on Schlumberger to log, Formation: Dolomite, M. 10.2, V. 40, W.L. 4, pH 9, C. 2/32, Bit No. 17 Size 8 23/32 (Diamond Corebit) Made 49 Ft. in 16 3/4 Hrs. Bit No. 18-Rerun Size 8 3/4 J44 Made 98 Ft. in 9 Hrs., Cored from 4793-4842

(Over)

9-24-70 Report at 6 A.M. 5073' waiting on Schlumberger

Formation: Dolomite, M. 10.3, V. 42,
W.L. 6.4, pH 7, C 2/32, Bit No. 16 (Rerun)

Made 231 Ft. in 33 Hrs. Total - made 581'

in 131½ Hrs.

9-25-70 Report at 6 A.M. 5075 Going in Hole to
Plug, Bit No. 18 (Rerun) Made 233 Ft in

33½ Hrs., 12 3/4 Hrs. Logging time,

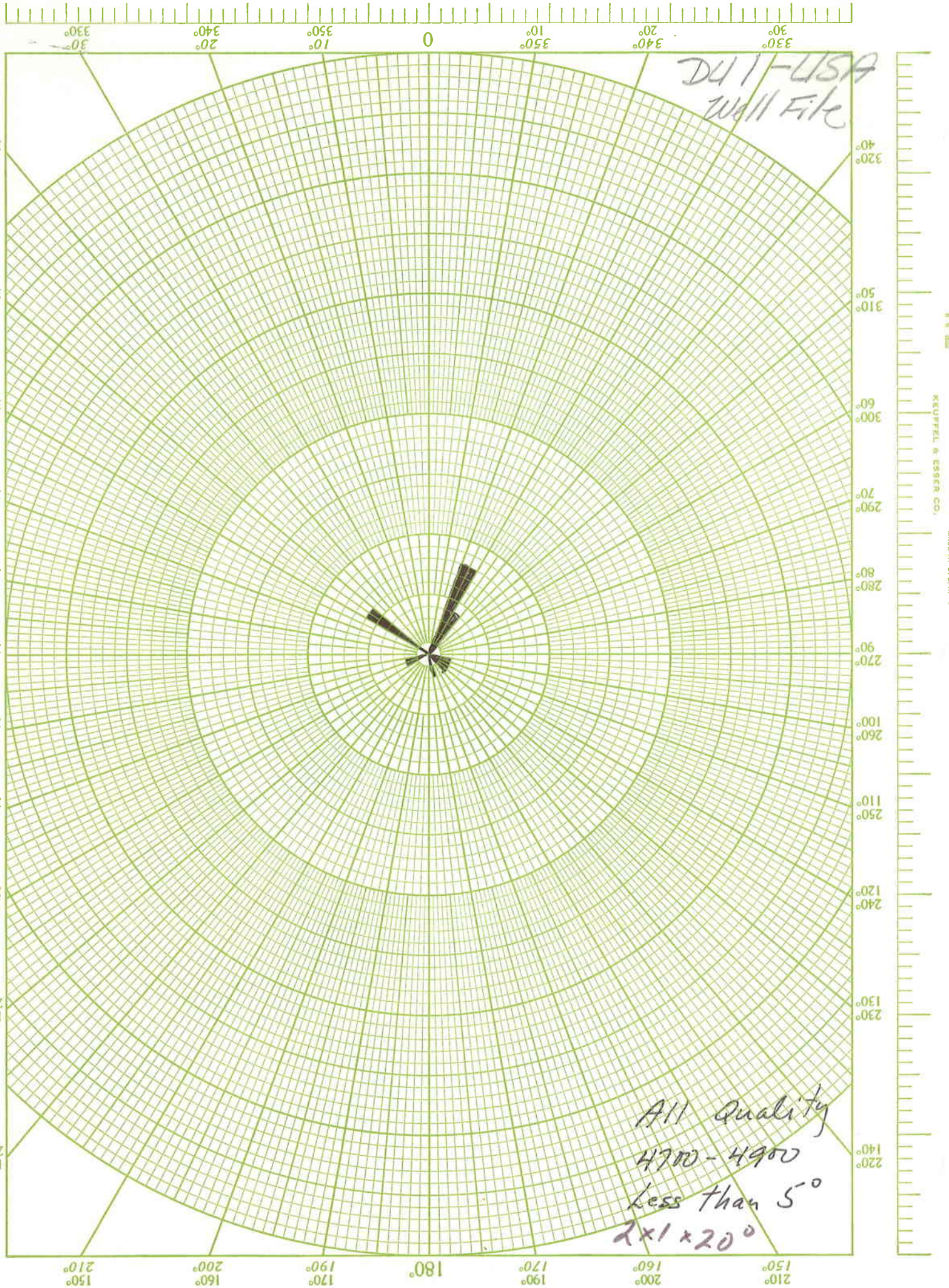
Driller T.D. 5075'

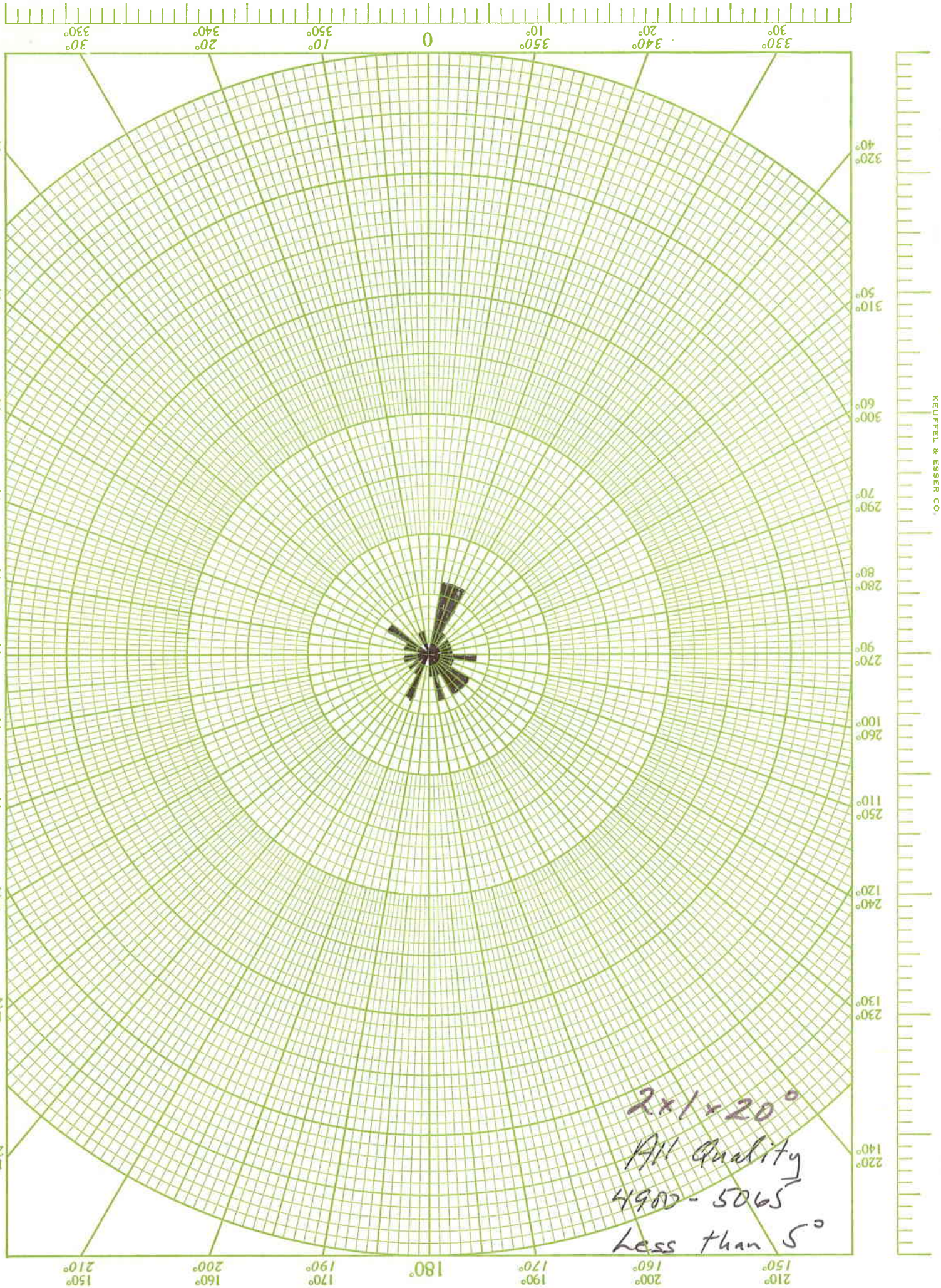
9-26-70 Report at 6 A.M. T.D. 5075, Plugged and

Rig Released 2:30 P.M. 9-25-70, Type Logs-

Sidewall Neutron, CDM, Laterlog, Formation

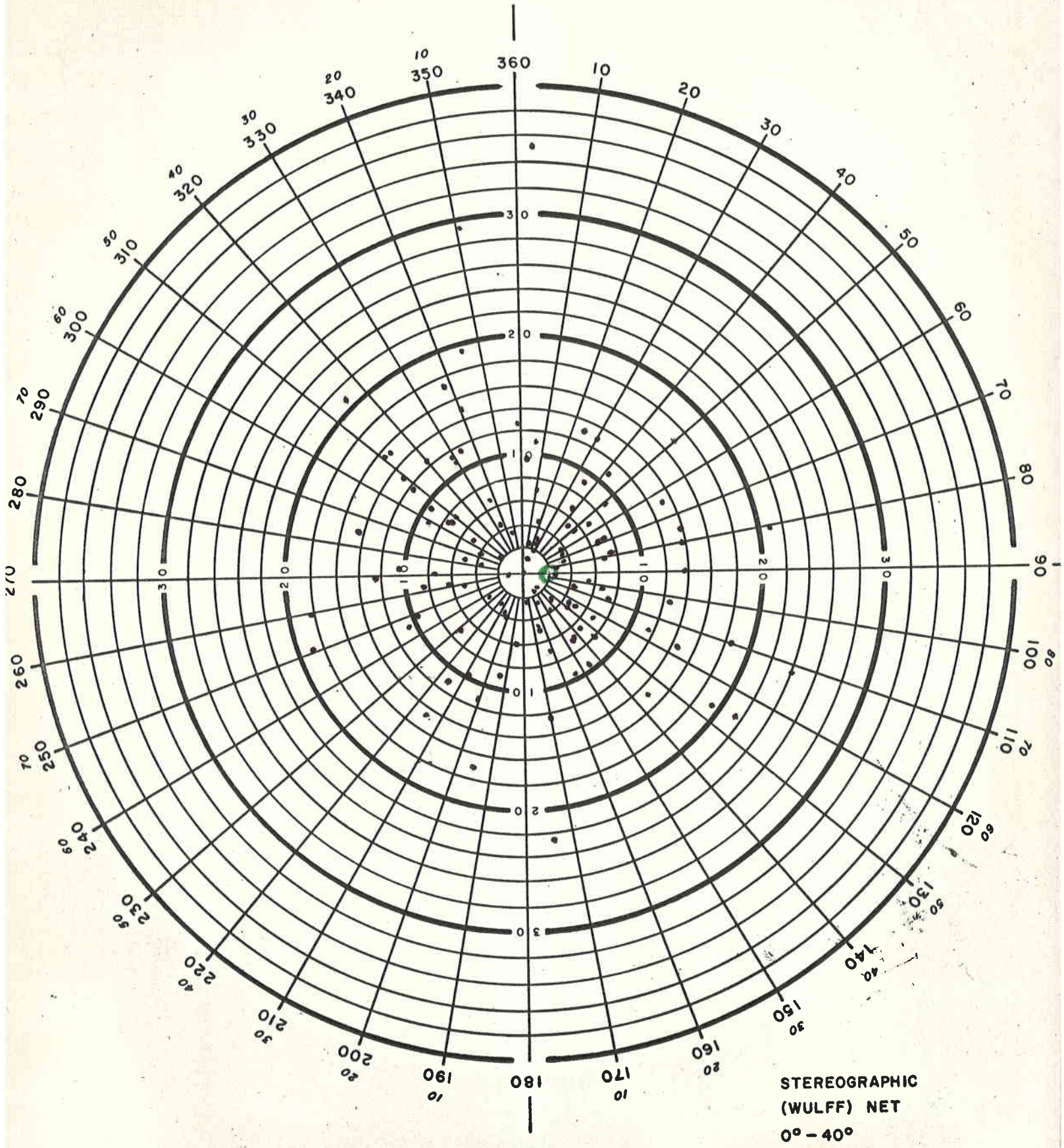
Density Log, Logger T.D. 5074'


DU1-USA
Well File
All Quality
4700 - 4900
Less than 5°
2x1x20°
0
180°
K&E POLAR CO-ORDINATE
KEUFFEL & ESSER CO.
46 4412
MADE IN U.S.A.

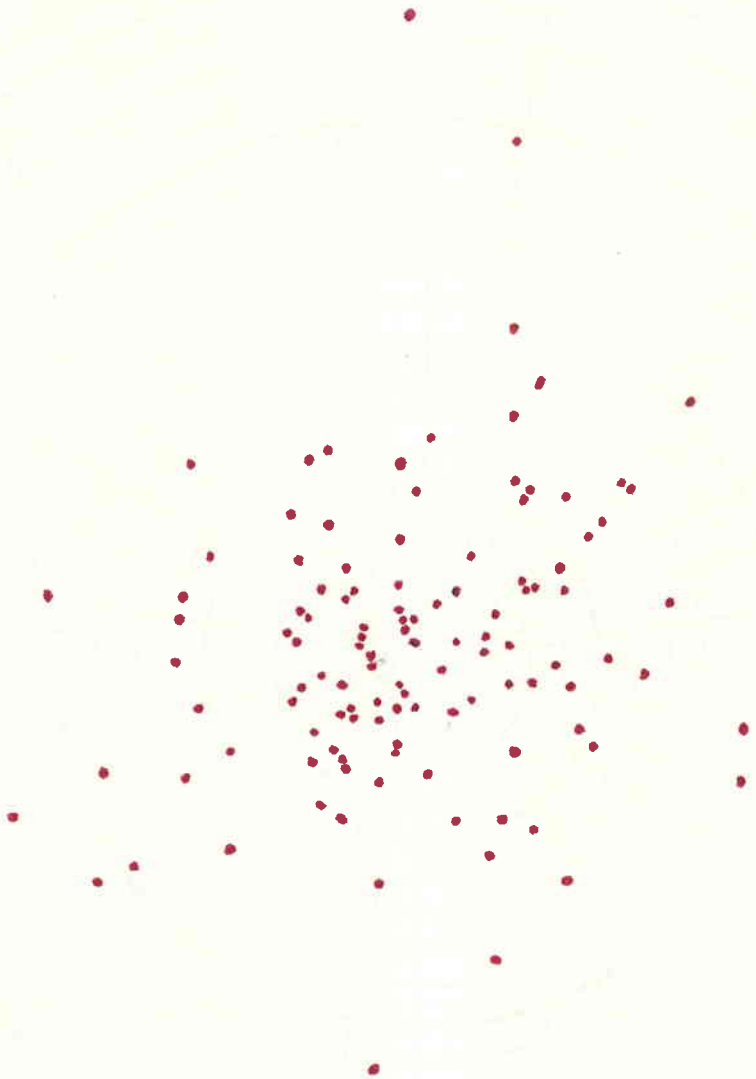

K+E POLAR CO-ORDINATE
KEUFFEL & ESSER CO.
46 4412
MADE IN U.S.A.
0
180°
2x1 = 20°
All Quality
4900 - 5065
Less than 5°

4900 - 5065

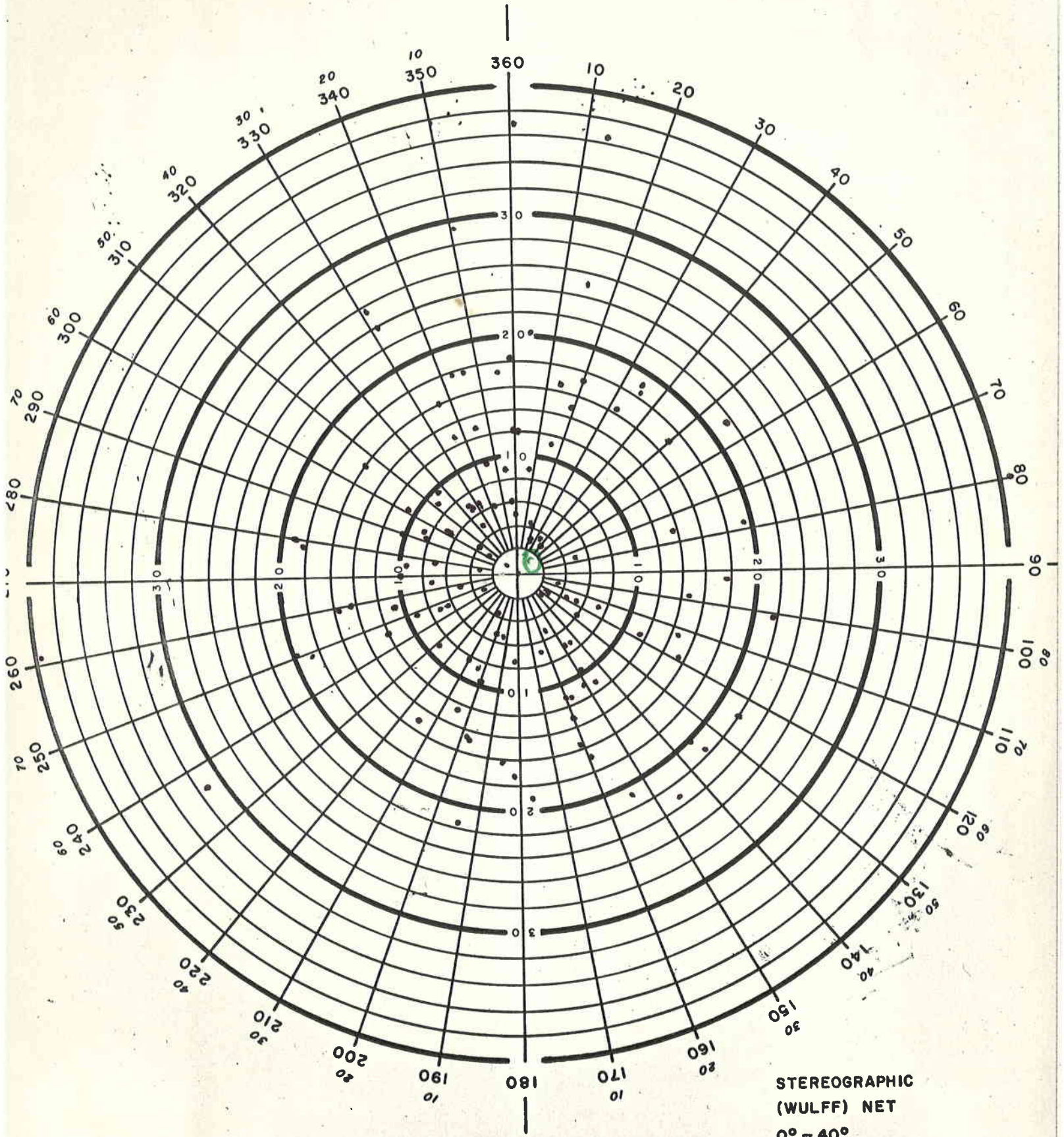
2×1 × 20°



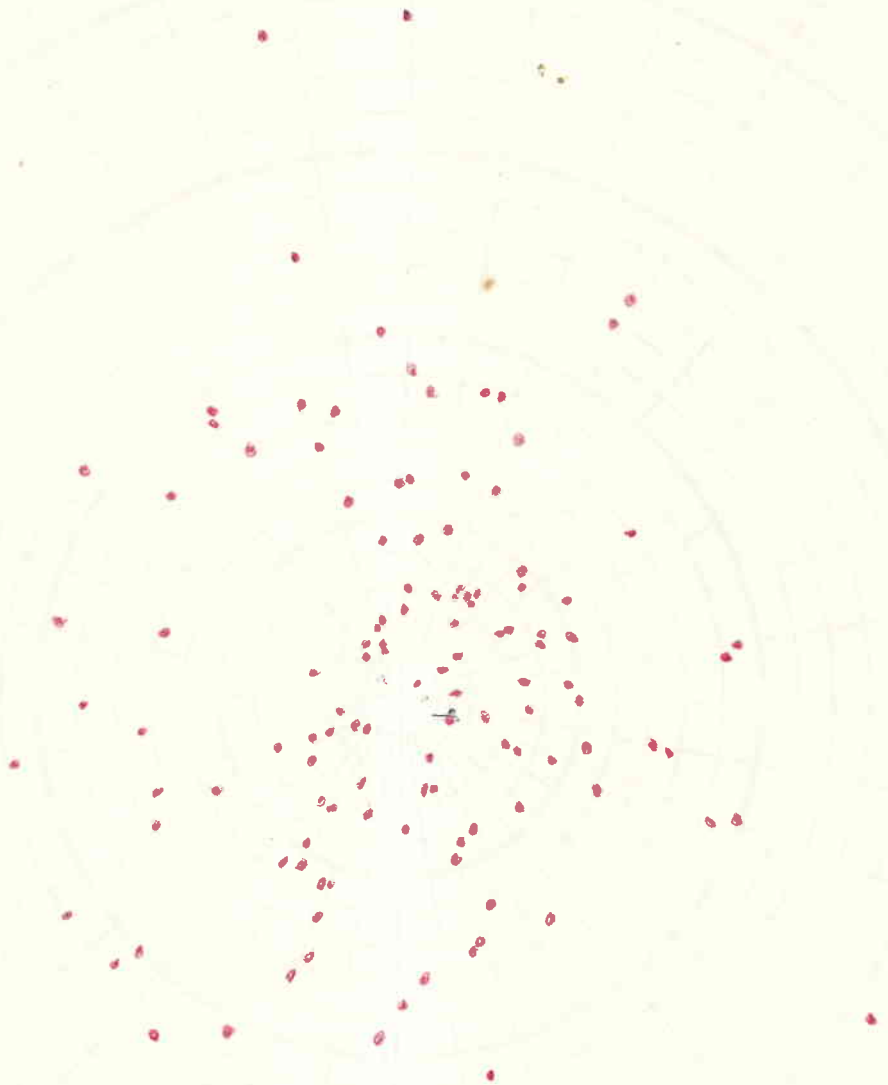
STEREOGRAPHIC
(WULFF) NET
0° – 40°

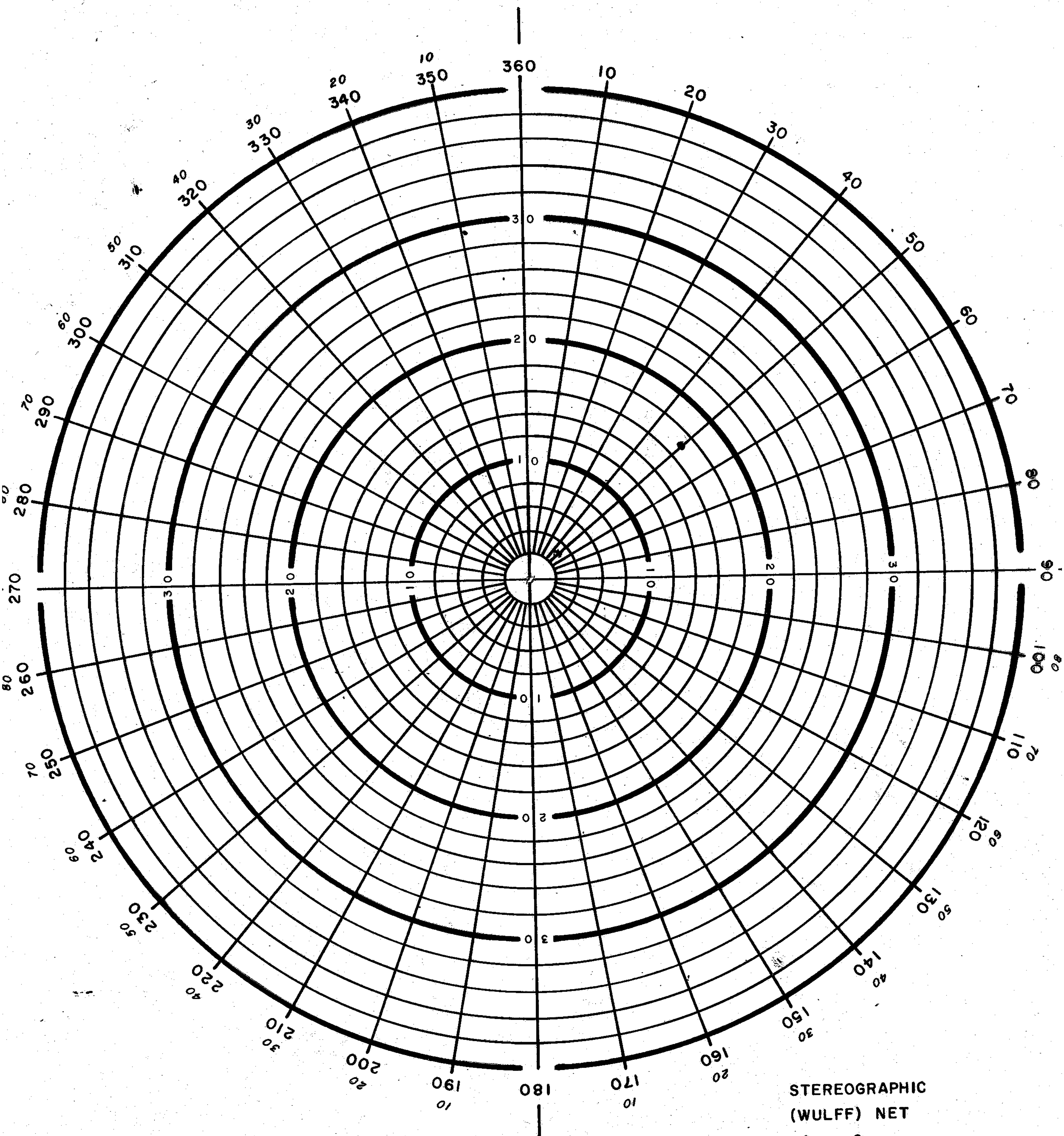


4700- 4900
2x1x 20°



STEREOGRAPHIC
(WULFF) NET
0° – 40°





STEREOGRAPHIC
(WULFF) NET
0° – 40°

4900' to 5940

WELL NAME

DEPTH

DEGREES	STRUC. DIP	RED	BLUE	DEGREES	STRUC. DIP	RED	BLUE
0-10	I (1)			180-190			
10-20	I (1)			190-200		I	
20-30	II (2)			200-210			
30-40				210-220	I (1)		
40-50				220-230	II (2)		
50-60	I (1)			230-240	III (3)		
60-70	I (1)			240-250	IIII (4)		
70-80	I (1)			250-260			
80-90				260-270			
90-100	II (2)			270-280			
100-110				280-290			
110-120				290-300			
120-130	I (1)			300-310			
130-140				310-320			
140-150				320-330			
150-160	I (1)			330-340			
160-170				340-350			
170-180				350-360			

315'
244/70

4700-4900

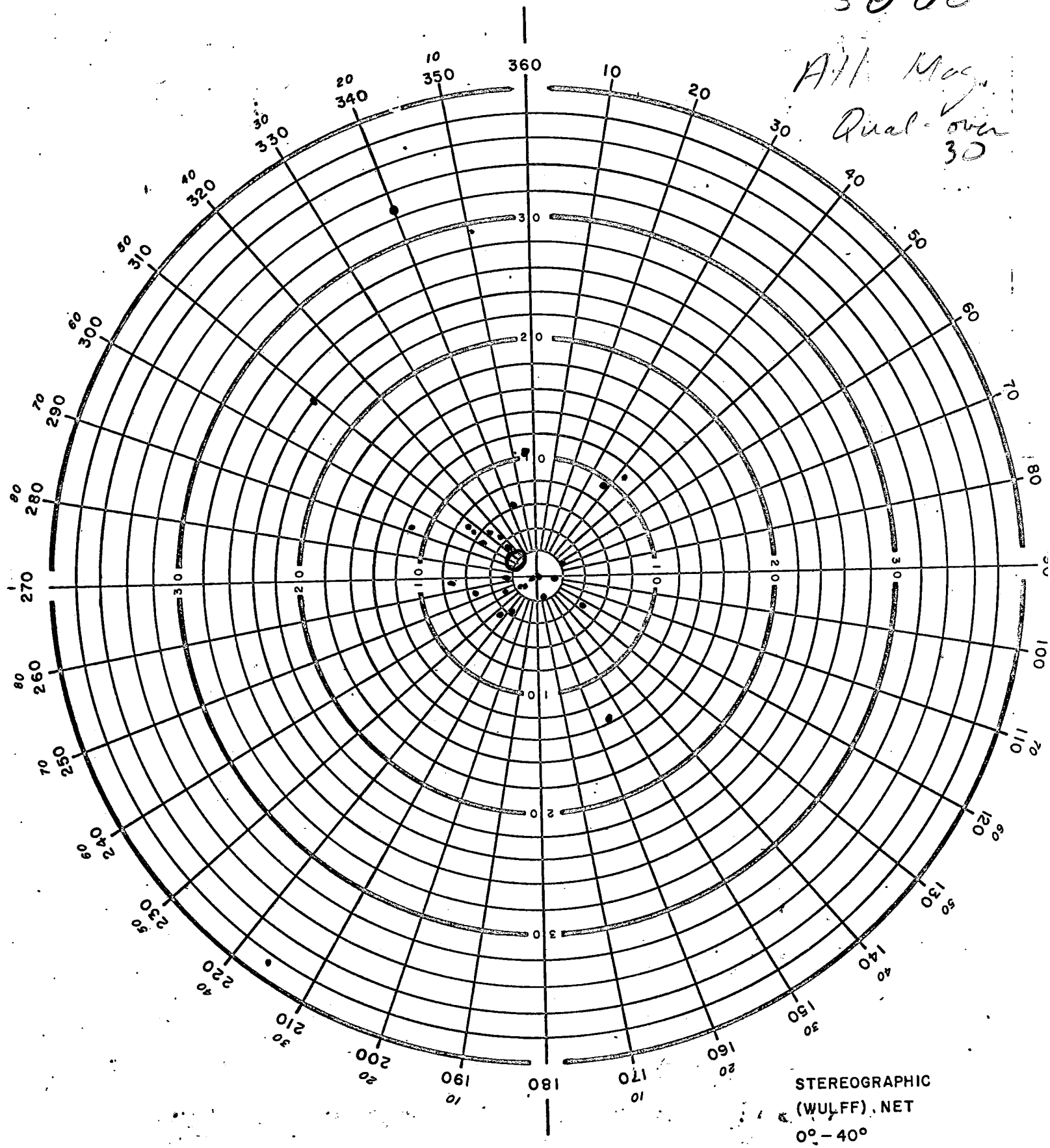
WELL NAME

4500-4700

DEPTH _____

DEGREES	STRUC. DIP	RED	BLUE	DEGREES	STRUC. DIP	RED	BLUE
0-10				180-190			
10-20				190-200			
20-30				200-210			
30-40				210-220			
40-50				220-230			
50-60				230-240			
60-70				240-250			
70-80				250-260			
80-90				260-270	11		
90-100				270-280			
100-110				280-290			
110-120				290-300			
120-130				300-310			
130-140				310-320	11		
140-150				320-330	1		
150-160				330-340			
160-170				340-350			
170-180				350-360			

4800' to
5060'
All Mag.
Qual. over
30



DIP FREQUENCY BY AZIMUTH

0-10 DEGREE DIPS IN 30 DEGREE SECTORS

	210	240	270	300	330	360	30	60	90	120	150	180
600- 700		1	1		1	2						
700- 800	3	5	1	4	2		2				2	1
800- 900		2	4	3	1	1			2	1	2	3
900- 1000	4	3	4			2	1	2		1		
1000- 1100	2	3	2	1	6					1		
1100- 1200	2		1	1	4	1		1		2	1	
1200- 1300		3	4		2	2				2	1	1
1300- 1400			4	3	4		2	1				3
1400- 1500				3	3	2	2		2	1		2
1500- 1600	1				1		2	1	2	2	4	4
1600- 1700		2	4	1	3	2	2		1		1	
1700- 1800		1	1	3	4	4	1	1	3		1	
1800- 1900	1	1	4	1	1	1		1	1		1	3
1900- 2000			1	1	1	2	1	2	2	1		1
2000- 2100	2	2	2	1	3	1			1	3		
2100- 2200				3	3	1			2	1	1	
2200- 2300				1	2		2	1		1		
2300- 2400	1				1	1	1	1		1		
2400- 2500			1				1					
2500- 2600				1	1		1					
2600- 2700			1	1								1
2700- 2800	1					1				1		
2800- 2900					1				1			
2900- 3000	1	2				1			1	3		

3000- 3100		3	1		2			1		2	2	4
3100- 3200						2						
3200- 3300			1		2	1	2	1				
3300- 3400		2	6		1				2	1		2
3400- 3500									1			
3500- 3600	1				2	2	1			1		
3600- 3700						3	6					
3700- 3800			1	1		1	4	1				
3800- 3900	1							1				1
3900- 4000						1		5	3	1	1	1
4000- 4100								1	1		2	
4100- 4200			1	2					1	1		
4200- 4300						1		2	1		1	1
4300- 4400	2					1						
4400- 4500		1		1		1	1	2		1	1	1
4500- 4600			1								1	2
4600- 4700												1
4700- 4800		1	1	1		1						
4800- 4900			3	2	6					1		
4900- 5000		2	1	1	1	1	1	3	2	4		3
5000- 5100	1	1		1			2			2		

DIP FREQUENCY BY AZIMUTH

10-90 DEGREE DIPS IN 30 DEGREE SECTORS

	210	240	270	300	330	360	30	60	90	120	150	180
600- 700												
700- 800	1	1					1					2
800- 900								1			1	
900- 1000			1	1	1							3
1000- 1100	1		1						1			
1100- 1200	1											
1200- 1300		2	1	1	2		1			1		
1300- 1400		1							1		1	
1400- 1500		1				2	2		1	1	2	
1500- 1600			1			1			3		2	
1600- 1700						2						2
1700- 1800			1	1	4							
1800- 1900				1				2				
1900- 2000			1	1	1	1	2					
2000- 2100			2	1	1				1			
2100- 2200		1		1		4						
2200- 2300	1			1			1		3		1	1
2300- 2400	3	1	1	1			1	1	2			
2400- 2500	3	3		2	2	2	1	2	2			
2500- 2600	1		1				3	2		2		
2600- 2700		1	1		3	1	2		1		2	
2700- 2800		1			2	5			1			
2800- 2900		2	1	1	3			2			3	
2900- 3000	1		1	2		1		3		2	1	

3000- 3100							1		1	3		1
3100- 3200			1	1	3	2			1	2	1	2
3200- 3300	1		2	1				2	3			2
3300- 3400	1				1		1	1				1
3400- 3500		1										
3500- 3600	1	1	1		2		1	1	1		1	
3600- 3700		1					2	3				
3700- 3800	1	2				3	2				1	1
3800- 3900		1	2	2	1	1	2	3	1	1		1
3900- 4000	1	1		1			3	2	1			
4000- 4100		3						1	1	1	3	
4100- 4200	2	1	1	2	2	1				2	4	2
4200- 4300	2	1	4	1	1	1		2	2		1	2
4300- 4400	1	2		1	2	1		1	1	2	1	1
4400- 4500	2	1	3	1							1	1
4500- 4600	2			1	1	1		1	1	1	1	1
4600- 4700	1		2	2	1		2	1	2	2	1	3
4700- 4800	3		2			1			2	2	4	
4800- 4900	1		2	2	1	2	1			1		
4900- 5000					1						1	1
5000- 5100	1			1		2						2

DIP FREQUENCY BY AZIMUTH

0--10 DEGREE DIPS IN 30 DEGREE SECTORS

	30	60	90	120	150	180	210	240	270	300	330	360
600- 700								1	1		1	2
700- 800	2				2	1	3	5	1	4	2	
800- 900			2	1	2	3		2	4	3	1	1
900- 1000	1	2		1			4	3	4			2
1000- 1100				1			2	3	2	1	6	
1100- 1200		1		2	1		2		1	1	4	1
1200- 1300				2	1	1		3	4		2	2
1300- 1400	2	1				3			4	3	4	
1400- 1500	2		2	1		2				3	3	2
1500- 1600	2	1	2	2	4	4	1				1	
1600- 1700	2		1		1			2	4	1	3	2
1700- 1800	1	1	3		1			1	1	3	4	4
1800- 1900		1	1		1	3	1	1	4	1	1	1
1900- 2000	1	2	2	1		1			1	1	1	2
2000- 2100			1	3			2	2	2	1	3	1
2100- 2200			2	1	1					3	3	1
2200- 2300	2	1		1						1	2	
2300- 2400	1	1		1			1				1	1
2400- 2500	1								1			
2500- 2600	1									1	1	
2600- 2700						1			1	1		
2700- 2800				1			1					1
2800- 2900			1								1	
2900- 3000			1	3			1	2				1

3000- 3100		1		2	2	4		3	1		2	
3100- 3200												2
3200- 3300	2	1							1		2	1
3300- 3400			2	1		2		2	6		1	
3400- 3500			1									
3500- 3600	1			1			1				2	2
3600- 3700	6											3
3700- 3800	4	1							1	1		1
3800- 3900		1				1	1					
3900- 4000		5	3	1	1	1						1
4000- 4100		1	1		2							
4100- 4200			1	1					1	2		
4200- 4300		2	1		1	1						1
4300- 4400							2					1
4400- 4500	1	2		1	1	1		1		1		1
4500- 4600					1	2			1			
4600- 4700						1						
4700- 4800								1	1	1		1
4800- 4900				1					3	2	6	
4900- 5000	1	3	2	4		3		2	1	1	1	1
5000- 5100	2			2			1	1		1		

DIP FREQUENCY BY AZIMUTH

0--90 DEGREE DIPS IN 30 DEGREE SECTORS

	30	60	90	120	150	180	210	240	270	300	330	360
600- 700								1	1		1	2
700- 800	3				2	3	4	6	1	4	2	
800- 900		1	2	1	3	3		2	4	3	1	1
900- 1000	1	2		1		3	4	3	5	1	1	2
1000- 1100			1	1			3	3	3	1	6	
1100- 1200		1		2	1		3		1	1	4	1
1200- 1300	1			3	1	1		5	5	1	4	2
1300- 1400	2	1	1		1	3		1	4	3	4	
1400- 1500	4		3	2	2	2		1		3	3	4
1500- 1600	2	1	5	2	6	4	1		1		1	1
1600- 1700	2		1		1	2		2	4	1	3	4
1700- 1800	1	1	3		1			1	2	4	8	4
1800- 1900		3	1		1	3	1	1	4	2	1	1
1900- 2000	3	2	2	1		1			2	2	2	3
2000- 2100			2	3			2	2	4	2	4	1
2100- 2200			2	1	1	1		1		4	3	5
2200- 2300	3	1	3	1	1	2	1			2	2	
2300- 2400	2	2	2	1		1	4	1	1	1	1	1
2400- 2500	2	2	2			1	3	3	1	2	2	2
2500- 2600	4	2		2			1		1	1	1	
2600- 2700	2		1		2	1		1	2	1	3	1
2700- 2800			1	1		1	1	1			2	6
2800- 2900		2	1		3			2	1	1	4	
2900- 3000		3	1	5	1		2	2	1	2		2

3000- 3100	1	1	1	5	2	5		3	1		2	
3100- 3200			1	2	1	2			1	1	3	4
3200- 3300	2	3	3			2	1		3	1	2	1
3300- 3400	1	1	2	1		3	1	2	6		2	
3400- 3500			1					1				
3500- 3600	2	1	1	1	1		2	1	1		4	2
3600- 3700	8	3						1				3
3700- 3800	6	1			1	1	1	2	1	1		4
3800- 3900	2	4	1	1		2	1	1	2	2	1	1
3900- 4000	3	7	4	1	1	1	1	1		1		1
4000- 4100		2	2	1	5			3				
4100- 4200			1	3	4	2	2	1	2	4	2	1
4200- 4300		4	3		2	3	2	1	4	1	1	2
4300- 4400		1	1	2	1	1	3	2		1	2	2
4400- 4500	1	2		1	2	2	2	2	3	2		1
4500- 4600		1	1	1	2	3	2		1	1	1	1
4600- 4700	2	1	2	2	1	4	1		2	2	1	
4700- 4800			2	2	4		3	1	3	1		2
4800- 4900	1			2			1		5	4	7	2
4900- 5000	1	3	2	4	1	4		2	1	1	2	1
5000- 5100	2			2		2	2	1		2		2

2 0000000000000000000000000000000000000000000

!03,T0844,0840,09/29/70

D-6232

SCHLUMBERGER TAPE DIPMETER

HDT-C 4-ARM DIGITAL MARK IV 6050

PLACID OIL COMPANY
U. S. A. D U NO. 1
RUN NO. ONE

WILDCAT
WAYNE COUNTY, UTAH
9-25-70

CORRELATION LENGTH 8 FT.

INITIAL SEARCH ANGLE 30 DEGREES

DEPTH	DIP	AZM	BRG	QUAL	DEV	AZM	BRG	AZI	RBR	D-13	D-24	Q	NUL
2804	28.2	56	N 56 E	0	.4	153	S 27 E	279	126	8.7	8.8	10	3
2808	19.4	333	N 27 W	13	.4	153	S 27 E	279	125	8.7	8.8	10	3
2812	25.6	330	N 30 W	100	.3	154	S 26 E	279	125	8.6	8.8	16	1
2820	12.5	155	S 25 E	100	.6	155	S 25 E	280	125	8.7	9.1	80	1
2824	12.9	154	S 26 E	100	.4	156	S 24 E	282	126	8.7	9.1	72	2
2828	4.3	80	N 80 E	38	.3	157	S 23 E	284	126	8.9	9.1	68	2
2844	15.8	235	S 55 W	100	.3	149	S 31 E	281	131	9.5	9.2	30	1
2864	6.3	338	N 22 W	10	.2	203	S 23 W	289	86	9.4	9.4	13	2
2868	12.9	272	N 88 W	100	.2	218	S 38 W	287	68	9.4	9.3	23	3
2876	24.5	234	S 54 W	100	.2	216	S 36 W	280	63	9.0	9.2	7	3
2880	11.8	52	N 52 E	30	.2	219	S 39 W	277	57	9.1	9.2	16	4
2888	26.3	135	S 45 E	0	.0	0		269	65	8.9	9.0	25	3
2892	15.6	327	N 33 W	12	.0	0		264	26	8.8	9.0	17	2
2896	20.1	296	N 64 W	0	.1	250	S 70 W	264	13	8.9	9.1	11	4
2900	19.2	147	S 33 E	10	.2	255	S 75 W	265	10	9.0	9.1	30	3
2904	6.3	133	S 47 E	0	.3	253	S 73 W	264	10	9.0	9.1	53	2
2908	15.0	312	N 48 W	10	.4	249	S 69 W	261	11	9.0	9.1	25	1
2912	18.6	72	N 72 E	10	.4	248	S 68 W	258	10	8.9	9.1	13	4
2916	27.2	214	S 34 W	100	.4	250	S 70 W	257	7	8.9	9.1	13	3
2920	4.8	231	S 51 W	100	.5	253	S 73 W	259	6	9.0	9.2	80	2
2924	4.1	234	S 54 W	100	.5	253	S 73 W	261	8	8.9	9.1	71	2
2928	.3	13	N 13 E	12	.4	247	S 67 W	259	12	8.9	9.1	55	2
2932	5.9	116	S 64 E	10	.4	246	S 66 W	254	7	9.0	9.1	36	2
2936	9.9	78	N 78 E	0	.5	255	S 75 W	246	351	9.0	9.1	50	3
2940	6.4	124	S 56 E	13	.5	258	S 78 W	242	343	9.0	9.1	81	2
2956	41.4	52	N 52 E	0	.6	255	S 75 W	240	344	8.8	9.1	23	1
2964	42.4	133	S 47 E	100	.6	251	S 71 W	236	345	9.0	9.1	21	4
2968	49.4	275	N 85 W	100	.7	250	S 70 W	235	345	9.1	9.1	34	2
2972	7.1	203	S 23 W	21	.7	250	S 70 W	234	343	9.2	9.1	17	2
2976	14.9	306	N 54 W	51	.7	250	S 70 W	231	340	9.3	9.1	35	1
2980	17.5	114	S 66 E	0	.7	252	S 72 W	227	335	9.2	9.0	17	3
2984	27.3	49	N 49 E	10	.7	253	S 73 W	223	330	9.0	8.8	5	2
2988	14.8	359	N 1 W	11	.7	252	S 72 W	219	327	8.8	8.8	8	3
3000	2.4	174	S 6 E	0	.9	239	S 59 W	212	332	8.6	8.8	12	1
3004	26.4	82	N 82 E	100	1.0	238	S 58 W	212	334	8.6	8.8	5	2
3020	20.7	132	S 48 E	0	.8	238	S 58 W	212	334	8.7	8.8	9	3
3024	24.2	108	S 72 E	30	.8	238	S 58 W	212	334	8.7	9.0	37	2
3028	23.8	109	S 71 E	100	.7	237	S 57 W	211	333	8.8	9.1	38	2
3036	8.6	267	S 87 W	100	.8	244	S 64 W	205	321	9.3	9.2	33	4

3040	5.1	130	S	50	E	100	.8	248	S	68	W	203	314	9.6	9.3	74	2
3044	5.6	180		SOUTH		19	.9	247	S	67	W	200	313	9.6	9.3	70	2
3048	8.3	58	N	58	E	12	1.0	247	S	67	W	198	311	9.6	9.3	28	1
3052	6.9	247	S	67	W	12	1.0	246	S	66	W	197	310	9.8	9.4	43	1
3056	5.8	227	S	47	W	51	1.0	243	S	63	W	194	310	9.4	9.3	76	1
3060	2.5	161	S	19	E	100	1.0	243	S	63	W	194	310	9.1	9.1	61	3
3064	26.1	194	S	14	W	100	1.0	244	S	64	W	197	313	9.1	9.1	24	2
3068	4.7	168	S	12	E	82	1.0	240	S	60	W	199	319	9.3	9.1	63	1
3072	1.2	187	S	7	W	100	.9	235	S	55	W	200	324	9.4	9.1	74	1
3076	1.8	163	S	17	E	100	.9	236	S	56	W	200	324	9.5	9.1	76	3
3080	3.3	127	S	53	E	33	1.0	236	S	56	W	200	323	9.7	9.1	68	3
3084	4.0	336	N	24	W	100	1.0	235	S	55	W	203	327	9.8	9.1	88	2
3088	3.4	319	N	41	W	39	.9	233	S	53	W	207	333	9.7	9.1	64	2
3092	2.2	251	S	71	W	28	1.0	232	S	52	W	210	337	9.5	8.9	64	1
3096	41.6	32	N	32	E	0	1.1	231	S	51	W	211	339	9.5	8.7	8	1
3100	47.5	322	N	38	W	0	1.2	231	S	51	W	211	340	9.6	8.7	3	2
3104	41.4	191	S	11	W	0	1.2	233	S	53	W	214	341	9.6	8.7	13	1
3120	23.7	271	N	89	W	60	1.4	236	S	56	W	227	351	9.7	8.7	9	1
3124	47.2	102	S	78	E	100	1.5	232	S	52	W	230	357	9.7	8.7	8	2
3128	37.5	309	N	51	W	18	1.7	230	S	50	W	232	1	9.6	8.7	9	4
3136	34.3	129	S	51	E	74	1.7	229	S	49	W	236	6	9.4	8.7	8	4
3140	25.3	336	N	24	W	0	1.8	228	S	48	W	237	8	9.5	8.7	6	4
3144	44.7	172	S	8	E	0	1.9	229	S	49	W	238	9	9.5	8.7	13	2
3148	25.1	124	S	56	E	0	1.9	229	S	49	W	241	11	9.4	8.7	5	1
3152	29.6	143	S	37	E	100	1.9	229	S	49	W	243	14	9.4	8.7	16	4
3156	39.2	333	N	27	W	0	2.0	229	S	49	W	244	15	9.3	8.7	8	2
3160	26.0	347	N	13	W	0	2.1	228	S	48	W	241	13	9.1	8.7	13	2
3168	12.3	358	N	2	W	27	2.0	231	S	51	W	235	3	8.7	8.7	12	4
3172	5.9	349	N	11	W	0	2.2	232	S	52	W	234	2	8.7	8.7	11	4
3172	5.9	349	N	11	W	0	2.2	232	S	52	W	234	2	8.7	8.7	11	4
3200	3.6	23	N	23	E	100	2.3	235	S	55	W	246	11	9.2	9.1	90	2
3204	2.8	32	N	32	E	100	2.3	233	S	53	W	250	17	9.5	9.4	73	2
3208	1.6	48	N	48	E	100	2.2	232	S	52	W	249	17	9.9	9.7	62	2
3212	2.5	14	N	14	E	100	2.1	233	S	53	W	248	15	9.9	9.5	49	3
3216	3.2	343	N	17	W	100	2.1	233	S	53	W	251	17	9.5	9.2	71	2
3220	3.4	339	N	21	W	100	2.2	232	S	52	W	255	22	9.2	9.0	82	2
3232	24.9	173	S	7	E	20	2.6	231	S	51	W	243	12	8.7	8.8	12	3
3236	15.7	77	N	77	E	18	2.6	233	S	53	W	240	7	8.8	8.8	15	3
3240	16.1	79	N	79	E	100	2.6	234	S	54	W	240	5	8.9	8.7	15	3
3252	24.4	255	S	75	W	0	2.7	235	S	55	W	245	9	8.9	8.7	9	3
3256	26.3	51	N	51	E	100	2.6	234	S	54	W	246	11	8.8	8.8	7	1
3268	13.8	100	S	80	E	100	2.6	234	S	54	W	252	18	8.8	9.1	71	1
3272	14.7	188	S	8	W	98	2.7	235	S	55	W	253	17	8.8	9.1	64	2
3276	8.4	270		WEST		100	2.7	236	S	56	W	254	18	8.7	8.9	47	2
3280	32.5	46	N	46	E	0	2.8	236	S	56	W	256	19	8.6	8.8	9	2
3288	24.3	295	N	65	W	10	3.0	237	S	57	W	261	24	8.6	9.1	11	4
3292	26.9	279	N	81	W	0	2.9	236	S	56	W	263	27	8.7	9.1	37	1
3296	38.2	198	S	18	W	0	3.1	236	S	56	W	265	29	8.7	9.1	13	2
3300	3.8	191	S	11	W	100	3.1	237	S	57	W	268	30	8.8	9.2	63	4
3304	1.9	100	S	80	E	100	3.1	238	S	58	W	271	32	8.8	9.4	74	1
3308	1.2	86	N	86	E	100	3.1	238	S	58	W	273	35	8.7	9.4	72	1
3312	7.1	335	N	25	W	100	2.7	238	S	58	W	273	35	8.7	9.4	66	4
3316	1.7	130	S	50	E	29	2.5	239	S	59	W	273	34	8.7	9.4	65	2
3320	3.6	264	S	84	W	85	2.5	239	S	59	W	275	35	8.8	9.6	73	2

3324	4.1	264	S	84	W	85	2.5	238	S	58	W	276	38	9.1	9.7	64	1
3328	4.7	250	S	70	W	22	2.7	236	S	56	W	271	35	9.3	9.8	69	4
3332	4.5	261	S	81	W	100	2.9	235	S	55	W	258	23	9.5	9.7	44	1
3336	3.2	273	N	87	W	96	2.9	237	S	57	W	248	11	9.5	9.4	55	4
3340	3.4	263	S	83	W	100	2.7	237	S	57	W	242	4	9.3	9.3	72	4
3344	3.5	237	S	57	W	100	2.7	238	S	58	W	238	0	9.0	9.2	84	1
3348	3.2	257	S	77	W	100	2.6	241	S	61	W	235	353	8.7	9.1	86	1
3360	16.3	323	N	37	W	100	2.6	245	S	65	W	229	343	8.7	9.0	9	3
3372	19.1	180		SOUTH		0	2.8	246	S	66	W	227	341	8.7	8.8	17	4
3380	25.6	27	N	27	E	23	3.0	246	S	66	W	226	340	8.7	8.8	9	3
3388	22.6	200	S	20	W	0	3.1	246	S	66	W	226	339	8.7	8.8	14	2
3392	7.9	173	S	7	E	0	3.2	246	S	66	W	226	339	8.7	8.8	22	1
3396	25.4	57	N	57	E	0	3.0	247	S	67	W	226	339	8.8	8.9	4	4
3408	5.4	76	N	76	E	11	3.0	248	S	68	W	228	340	8.6	8.8	9	1
3412	11.2	243	S	63	W	20	3.1	248	S	68	W	229	341	8.7	8.8	13	3
3520	48.5	62	N	62	E	47	3.1	241	S	61	W	228	346	8.8	8.8	5	1
3528	44.1	40	N	40	E	69	3.3	238	S	58	W	222	343	8.8	8.8	7	1
3532	46.5	256	S	76	W	60	3.3	236	S	56	W	217	341	8.8	8.8	8	1
3540	24.2	249	S	69	W	0	3.7	232	S	52	W	210	338	8.7	8.8	10	4
3544	5.5	200	S	20	W	10	3.5	231	S	51	W	207	336	8.7	8.8	13	4
3548	41.2	324	N	36	W	98	3.4	230	S	50	W	205	334	8.8	9.0	16	1
3552	18.8	220	S	40	W	42	3.3	230	S	50	W	203	333	8.8	9.1	3	1
3556	15.0	102	S	78	E	15	3.5	230	S	50	W	200	329	8.8	9.1	12	2
3560	29.7	338	N	22	W	0	3.7	233	S	53	W	195	321	8.7	9.1	27	1
3564	11.4	154	S	26	E	0	3.7	234	S	54	W	192	317	8.7	9.1	12	1
3568	6.5	337	N	23	W	98	3.7	235	S	55	W	193	318	8.7	9.2	27	1
3572	7.2	1	N	1	E	100	3.7	234	S	54	W	197	322	8.8	9.2	40	2
3576	6.4	336	N	24	W	14	3.6	233	S	53	W	198	325	8.9	9.2	65	2
3580	2.3	124	S	56	E	100	3.4	231	S	51	W	199	327	9.1	9.3	64	2
3592	2.9	3	N	3	E	100	3.5	230	S	50	W	199	329	9.2	9.3	57	1
3596	3.3	35	N	35	E	22	3.5	230	S	50	W	199	328	9.2	9.4	62	1
3600	3.3	19	N	19	E	100	3.5	231	S	51	W	199	328	9.2	9.2	71	1
3604	6.0	1	N	1	E	29	3.4	231	S	51	W	200	328	9.0	9.2	75	1
3612	6.4	39	N	39	E	100	3.3	229	S	49	W	202	332	9.0	9.3	50	1
3616	6.2	17	N	17	E	100	3.4	229	S	49	W	203	333	9.2	9.4	69	1
3620	5.9	353	N	7	W	100	3.4	229	S	49	W	204	334	9.5	9.6	63	1
3624	5.0	4	N	4	E	100	3.3	229	S	49	W	203	333	9.4	9.7	62	1
3628	4.1	28	N	28	E	100	3.3	229	S	49	W	198	328	9.1	9.4	72	2
3632	8.1	42	N	42	E	100	3.3	230	S	50	W	192	321	9.0	9.2	80	1
3636	9.8	35	N	35	E	69	3.3	230	S	50	W	187	317	9.3	9.3	65	1
3640	14.3	46	N	46	E	44	3.2	228	S	48	W	188	320	9.3	9.4	54	2
3644	28.6	58	N	58	E	26	3.2	227	S	47	W	196	328	9.3	9.4	46	3
3648	45.7	64	N	64	E	0	3.2	228	S	48	W	202	334	9.5	9.6	22	3
3652	28.8	252	S	72	W	0	3.3	228	S	48	W	204	335	9.4	9.6	23	3
3692	16.5	23	N	23	E	0	3.4	222	S	42	W	228	5	8.7	8.7	9	4
3696	24.4	39	N	39	E	20	3.4	222	S	42	W	227	4	8.7	8.7	16	3
3700	28.9	147	S	33	E	14	3.5	222	S	42	W	225	3	8.8	8.7	7	3
3704	28.2	208	S	28	W	0	3.5	220	S	40	W	223	2	8.7	8.7	11	3

3708	59.9	23	N	23	E	13	3.5	219	S	39	W	220	0	8.7	8.7	8	4
3712	23.7	32	N	32	E	65	3.5	221	S	41	W	218	356	8.8	8.8	10	4
3716	61.5	357	N	3	W	0	3.5	223	S	43	W	214	351	8.8	8.8	11	1
3720	11.4	190	S	10	W	100	3.5	223	S	43	W	211	347	8.8	8.8	10	2
3736	36.3	359	N	1	W	100	3.6	224	S	44	W	202	337	8.7	8.7	12	1
3740	35.8	358	N	2	W	14	3.6	225	S	45	W	202	337	8.9	8.7	12	1
3744	24.1	245	S	65	W	11	3.7	224	S	44	W	202	337	9.2	8.7	13	2
3756	2.2	32	N	32	E	100	3.5	224	S	44	W	202	337	9.6	8.8	38	1
3760	8.0	265	S	85	W	100	3.5	226	S	46	W	201	334	9.7	8.8	34	2
3772	4.5	309	N	51	W	48	2.9	228	S	48	W	204	336	9.1	8.9	35	4
3776	6.0	29	N	29	E	100	3.1	230	S	50	W	196	326	8.8	9.0	77	3
3780	5.4	56	N	56	E	10	3.1	228	S	48	W	183	315	8.7	9.1	85	3
3784	5.9	37	N	37	E	100	3.2	225	S	45	W	174	309	8.7	9.2	33	2
3788	10.8	225	S	45	W	10	3.3	223	S	43	W	172	308	8.8	9.2	29	1
3792	6.3	7	N	7	E	14	3.2	222	S	42	W	172	310	8.8	9.2	74	1
3796	4.8	25	N	25	E	100	3.2	223	S	43	W	174	311	8.7	9.5	73	2
3800	5.7	66	N	66	E	19	3.2	227	S	47	W	180	312	8.8	9.6	82	2
3820	29.4	273	N	87	W	0	3.0	230	S	50	W	209	338	8.7	9.5	3	4
3824	40.0	73	N	73	E	100	3.0	231	S	51	W	212	340	8.6	9.6	12	2
3828	38.2	79	N	79	E	100	3.1	233	S	53	W	218	344	8.7	9.4	0	1
3832	27.2	105	S	75	E	0	3.2	231	S	51	W	225	353	8.8	9.2	0	4
3836	2.4	201	S	21	W	100	3.2	228	S	48	W	225	356	8.8	9.2	5	1
3840	4.9	165	S	15	E	11	3.1	229	S	49	W	223	354	8.8	9.4	2	1
3844	18.4	7	N	7	E	10	3.1	230	S	50	W	224	353	8.8	9.5	11	4
3852	44.9	268	S	88	W	0	3.1	230	S	50	W	229	359	8.8	9.6	11	1
3860	46.9	327	N	33	W	64	3.3	235	S	55	W	224	349	8.8	9.7	12	2
3864	46.0	38	N	38	E	43	3.5	237	S	57	W	213	336	9.0	9.8	13	3
3868	31.3	309	N	51	W	0	3.7	238	S	58	W	208	330	9.1	9.9	13	3
3872	28.4	238	S	58	W	13	3.7	243	S	63	W	206	322	9.3	9.8	4	4
3876	51.6	31	N	31	E	10	3.7	247	S	67	W	207	320	9.5	9.8	12	2
3880	34.9	189	S	9	W	0	3.6	247	S	67	W	209	322	9.6	10.0	4	1
3888	19.5	66	N	66	E	0	3.4	252	S	72	W	223	331	9.2	10.1	15	3
3892	20.5	289	N	71	W	0	3.2	254	S	74	W	228	333	9.1	10.1	10	4
3896	26.7	65	N	65	E	63	3.2	256	S	76	W	230	334	9.1	10.1	9	4
3900	6.7	95	S	85	E	0	3.1	259	S	79	W	235	336	9.1	10.2	5	2
3904	2.2	62	N	62	E	13	3.0	260	S	80	W	242	342	9.0	10.5	41	2
3908	2.1	155	S	25	E	13	3.0	259	S	79	W	245	346	8.9	10.1	43	2
3912	29.4	104	S	76	E	0	3.1	257	S	77	W	243	346	8.7	9.6	58	4
3916	19.3	24	N	24	E	10	3.1	256	S	76	W	237	341	8.7	9.4	35	1
3920	2.2	62	N	62	E	100	3.1	257	S	77	W	230	333	8.7	9.4	78	1
3924	2.7	64	N	64	E	100	3.1	257	S	77	W	222	325	8.7	9.4	75	1
3928	15.0	27	N	27	E	71	3.2	257	S	77	W	211	314	8.7	9.5	29	1
3932	39.6	288	N	72	W	100	3.5	257	S	77	W	203	306	8.8	9.4	12	4
3940	37.8	250	S	70	W	66	3.3	258	S	78	W	199	301	8.8	9.1	14	1
3944	44.6	64	N	64	E	100	3.3	259	S	79	W	198	299	8.8	9.1	20	4
3952	22.2	55	N	55	E	0	3.3	262	S	82	W	198	296	8.7	9.4	0	2
3964	9.9	45	N	45	E	0	3.5	264	S	84	W	191	286	8.8	9.6	0	4
3968	3.9	107	S	73	E	0	3.5	264	S	84	W	186	281	8.8	9.6	32	2
3972	2.8	85	N	85	E	0	3.3	264	S	84	W	183	278	8.8	9.7	41	2
3976	10.5	218	S	38	W	45	3.3	263	S	83	W	182	278	8.8	9.8	28	1
3980	11.9	32	N	32	E	13	3.5	264	S	84	W	184	279	8.8	9.8	32	2
3984	3.5	186	S	6	W	100	3.6	264	S	84	W	184	280	8.8	9.8	72	3
3988	2.8	69	N	69	E	100	3.7	264	S	84	W	182	277	8.8	9.8	67	4
3992	3.6	13	N	13	E	100	3.7	264	S	84	W	179	274	8.8	9.9	28	1

3996	3.2	81	N	81	E	14	3.8	264	S	84	W	179	274	8.8	10.0	38	2
4000	29.2	227	S	47	W	63	4.0	265	S	85	W	181	276	8.8	9.9	12	2
4004	.4	51	N	51	E	100	3.9	268	S	88	W	189	281	8.8	9.8	77	3
4008	.3	158	S	22	E	60	3.9	271	N	89	W	196	285	8.8	9.8	78	1
4012	25.1	243	S	63	W	13	3.9	271	N	89	W	197	285	8.8	9.9	10	4
4016	16.7	80	N	80	E	100	4.0	272	N	88	W	197	285	8.8	10.0	33	2
4020	5.6	153	S	27	E	0	4.2	272	N	88	W	197	285	8.7	9.9	23	1
4064	4.9	93	S	87	E	0	5.0	275	N	85	W	194	278	8.4	9.7	6	1
4068	38.6	252	S	72	W	100	5.0	277	N	83	W	196	279	8.4	9.7	11	4
4072	21.4	146	S	34	E	10	5.0	278	N	82	W	197	279	8.4	9.7	10	4
4076	24.4	146	S	34	E	0	5.1	277	N	83	W	198	280	8.4	9.7	7	1
4080	37.0	113	S	67	E	0	5.3	277	N	83	W	199	281	8.4	9.8	6	2
4088	15.3	143	S	37	E	10	5.5	276	N	84	W	202	285	8.5	9.8	12	4
4092	27.1	45	N	45	E	10	5.5	276	N	84	W	205	288	8.6	9.9	27	2
4100	23.2	176	S	4	E	100	5.4	277	N	83	W	206	289	8.7	9.5	39	2
4104	12.6	214	S	34	W	0	5.4	279	N	81	W	203	284	8.8	9.5	16	3
4108	32.5	357	N	3	W	41	5.4	279	N	81	W	199	280	9.0	9.6	2	1
4112	23.6	123	S	57	E	0	5.5	278	N	82	W	197	278	9.0	9.5	9	4
4116	37.0	294	N	66	W	0	5.5	275	N	85	W	190	274	8.9	9.2	10	2
4120	35.1	148	S	32	E	0	5.4	273	N	87	W	180	267	8.7	9.1	3	1
4128	34.7	221	S	41	W	0	5.3	278	N	82	W	173	255	8.7	9.1	12	4
4136	39.5	160	S	20	E	100	5.5	281	N	79	W	162	241	8.7	9.4	24	3
4140	13.5	335	N	25	W	40	5.4	283	N	77	W	153	229	8.8	9.2	45	1
4144	15.7	299	N	61	W	100	5.2	289	N	71	W	147	218	8.7	9.1	49	1
4148	41.6	324	N	36	W	63	5.0	290	N	70	W	147	216	8.7	9.1	21	1
4152	19.4	176	S	4	E	93	4.9	290	N	70	W	146	215	8.8	9.0	1	1
4156	10.0	272	N	88	W	100	5.1	290	N	70	W	144	214	8.8	9.1	15	2
4160	1.6	83	N	83	E	100	5.0	288	N	72	W	140	212	8.8	9.3	41	2
4164	2.6	122	S	58	E	100	4.9	285	N	75	W	133	207	8.7	9.4	48	2
4168	14.6	254	S	74	W	10	4.9	286	N	74	W	128	201	8.8	9.4	6	2
4172	25.6	110	S	70	E	100	4.7	288	N	72	W	126	197	8.9	9.4	18	1
4176	3.0	305	N	55	W	30	4.8	289	N	71	W	127	198	9.1	9.4	14	1
4180	2.3	287	N	73	W	49	4.8	289	N	71	W	126	196	9.1	9.4	41	2
4184	9.5	276	N	84	W	21	4.6	292	N	68	W	123	191	9.0	9.6	5	3
4188	31.0	163	S	17	E	0	4.5	294	N	66	W	120	185	9.0	9.7	13	2
4192	26.6	147	S	33	E	87	4.4	294	N	66	W	116	181	8.9	9.6	17	3
4200	37.0	274	N	86	W	65	4.5	290	N	70	W	108	177	8.8	9.4	19	1
4204	34.1	277	N	83	W	100	4.5	291	N	69	W	107	175	8.9	9.3	4	1
4208	37.8	173	S	7	E	0	4.6	292	N	68	W	107	174	9.0	9.2	21	4
4212	52.0	90		EAST		23	4.5	294	N	66	W	106	172	9.0	9.2	16	1
4216	24.3	207	S	27	W	19	4.5	296	N	64	W	105	169	8.8	9.1	17	2
4220	13.3	228	S	48	W	100	4.2	298	N	62	W	104	166	8.6	9.1	19	1
4224	30.3	139	S	41	E	68	4.1	300	N	60	W	103	162	8.6	9.0	22	1
4228	5.2	185	S	5	W	11	4.3	299	N	61	W	100	160	8.6	8.8	13	4
4232	18.5	274	N	86	W	0	4.2	298	N	62	W	96	158	8.7	8.8	11	2
4240	2.9	55	N	55	E	100	4.3	300	N	60	W	83	143	8.7	9.0	54	2
4244	3.1	63	N	63	E	100	4.2	301	N	59	W	79	137	8.7	9.0	33	1
4248	31.5	272	N	88	W	18	4.1	301	N	59	W	76	135	8.8	8.9	15	1
4256	56.4	76	N	76	E	0	4.1	298	N	62	W	69	131	8.8	8.8	23	4
4260	29.2	324	N	36	W	0	4.1	296	N	64	W	65	129	8.8	8.9	17	1
4264	25.8	64	N	64	E	10	3.9	295	N	65	W	61	126	8.8	8.9	16	2

4268	48.9	215	S	35	W	100	3.9	295	N	65	W	55	119	8.8	8.8	15	1
4272	1.8	100	S	80	E	0	4.0	298	N	62	W	49	111	8.7	8.8	30	2
4276	.8	14	N	14	E	11	4.1	300	N	60	W	47	106	8.7	8.8	28	2
4280	29.7	171	S	9	E	0	3.8	301	N	59	W	46	105	8.7	8.8	21	1
4284	4.5	159	S	21	E	25	3.6	302	N	58	W	45	103	8.7	8.8	14	4
4288	24.0	314	N	46	W	100	3.6	302	N	58	W	44	102	8.8	8.8	23	4
4292	27.1	9	N	9	E	0	3.5	301	N	59	W	43	101	8.8	8.9	14	4
4296	28.7	65	N	65	E	0	3.6	300	N	60	W	41	101	8.8	8.9	20	2
4304	12.7	239	S	59	W	44	3.6	298	N	62	W	36	97	8.7	8.8	25	1
4308	24.7	359	N	1	W	0	3.7	296	N	64	W	32	95	8.6	8.9	18	2
4312	34.4	168	S	12	E	0	3.8	295	N	65	W	27	91	8.7	9.1	29	1
4316	16.2	327	N	33	W	13	3.8	297	N	63	W	22	85	8.6	9.0	1	4
4320	27.4	322	N	38	W	0	3.7	299	N	61	W	18	79	8.7	8.9	6	3
4324	6.2	213	S	33	W	32	3.5	300	N	60	W	15	75	8.8	9.1	1	3
4328	15.9	224	S	44	W	47	3.3	298	N	62	W	11	73	8.7	9.0	12	3
4344	43.5	119	S	61	E	74	3.3	295	N	65	W	5	70	8.7	8.9	26	2
4356	48.4	49	N	49	E	0	3.1	300	N	60	W	0	59	8.8	8.9	23	1
4360	15.5	77	N	77	E	74	3.1	300	N	60	W	359	58	8.7	8.8	25	4
4364	2.2	351	N	9	W	100	3.2	300	N	60	W	356	56	8.6	8.8	8	4
4368	44.3	239	S	59	W	0	3.4	301	N	59	W	354	52	8.7	8.8	36	4
4372	23.7	287	N	73	W	0	3.2	301	N	59	W	351	49	8.8	8.8	13	4
4376	19.1	114	S	66	E	54	2.9	299	N	61	W	348	48	8.8	8.9	20	1
4380	7.2	222	S	42	W	10	3.0	299	N	61	W	345	45	8.7	8.8	66	1
4396	16.8	135	S	45	E	0	2.9	298	N	62	W	337	38	8.7	8.8	17	4
4404	49.9	136	S	44	E	25	3.1	302	N	58	W	334	32	8.7	8.9	20	4
4408	6.1	130	S	50	E	0	3.1	303	N	57	W	333	30	8.7	8.9	23	4
4412	21.5	282	N	78	W	0	3.0	302	N	58	W	332	29	8.8	8.8	14	4
4416	.9	16	N	16	E	12	2.9	301	N	59	W	330	29	8.8	8.8	15	1
4420	15.3	193	S	13	W	27	2.7	300	N	60	W	329	29	8.8	8.8	50	2
4424	5.7	348	N	12	W	100	2.6	299	N	61	W	328	29	8.7	8.9	40	2
4428	8.6	311	N	49	W	65	2.5	299	N	61	W	328	29	8.7	8.9	57	4
4432	14.0	311	N	49	W	100	2.6	300	N	60	W	327	27	8.7	8.8	18	2
4444	2.1	158	S	22	E	100	2.7	307	N	53	W	319	12	8.8	9.0	37	2
4452	16.2	224	S	44	W	34	2.6	304	N	56	W	310	6	8.7	9.1	17	4
4456	2.4	53	N	53	E	0	2.7	302	N	58	W	306	4	8.8	9.6	74	4
4460	1.9	63	N	63	E	10	2.9	303	N	57	W	301	358	9.3	11.1	47	4
4464	28.6	279	N	81	W	17	2.8	306	N	54	W	299	352	9.2	10.7	30	1
4468	45.3	214	S	34	W	26	2.5	307	N	53	W	297	350	8.6	9.1	17	4
4476	7.3	167	S	13	E	43	2.4	309	N	51	W	295	346	8.7	9.1	15	4
4480	11.7	246	S	66	W	10	2.5	309	N	51	W	294	345	8.7	9.0	34	2
4484	6.0	232	S	52	W	51	2.7	309	N	51	W	291	341	8.8	8.9	38	3
4488	12.6	279	N	81	W	0	2.5	309	N	51	W	289	339	8.8	9.0	52	1
4500	30.0	60	N	60	E	21	2.6	304	N	56	W	275	330	8.8	8.9	27	4
4504	3.1	150	S	30	E	0	2.5	303	N	57	W	268	325	8.8	8.9	49	4
4508	3.4	176	S	4	E	10	2.5	305	N	55	W	264	319	8.7	9.1	24	1
4512	28.2	299	N	61	W	100	2.3	309	N	51	W	263	314	8.7	9.6	10	3
4516	7.8	271	N	89	W	15	2.4	309	N	51	W	261	312	8.8	9.7	8	4
4532	41.6	345	N	15	W	0	2.7	305	N	55	W	243	298	8.9	9.6	18	2
4560	19.4	186	S	6	W	10	2.1	306	N	54	W	232	285	8.7	9.2	13	4
4564	48.3	217	S	37	W	10	2.1	305	N	55	W	224	279	8.8	9.1	45	2
4572	19.7	344	N	16	W	62	2.3	300	N	60	W	216	276	8.7	8.8	13	2
4576	29.2	129	S	51	E	64	2.3	298	N	62	W	213	275	8.8	8.8	13	3
4580	44.8	139	S	41	E	0	2.1	297	N	63	W	209	272	8.8	8.8	17	2
4584	50.1	88	N	88	E	34	2.1	299	N	61	W	205	266	8.7	8.8	10	4

4588	19.4	209	S	29	W	61	2.2	301	N	59	W	203	261	8.7	8.8	16	3
4596	2.5	192	S	12	W	33	2.2	302	N	58	W	199	256	8.7	8.9	90	2
4600	6.7	165	S	15	E	56	2.1	306	N	54	W	196	250	8.7	8.8	84	2
4604	12.8	208	S	28	W	100	2.1	308	N	52	W	194	245	8.7	8.8	79	2
4608	22.6	188	S	8	W	29	2.1	309	N	51	W	192	243	8.7	8.8	87	3
4612	24.3	295	N	65	W	96	2.1	305	N	55	W	190	244	8.7	8.8	73	1
4620	29.4	339	N	21	W	30	2.1	297	N	63	W	184	246	8.7	8.8	7	3
4624	45.2	105	S	75	E	25	2.1	295	N	65	W	185	249	8.8	8.8	11	2
4628	25.9	87	N	87	E	100	2.1	298	N	62	W	188	250	8.7	8.9	15	3
4632	49.3	34	N	34	E	100	2.2	301	N	59	W	190	248	8.7	8.9	12	1
4636	49.5	288	N	72	W	19	2.2	303	N	57	W	189	246	8.8	8.8	9	2
4644	29.0	94	S	86	E	17	2.5	304	N	56	W	186	241	8.7	8.8	6	1
4648	19.8	122	S	58	E	17	2.2	304	N	56	W	185	241	8.8	8.8	8	4
4656	41.0	34	N	34	E	100	2.3	302	N	58	W	185	242	8.8	8.9	25	2
4668	37.6	145	S	35	E	10	2.3	302	N	58	W	191	249	8.8	9.1	19	4
4680	23.9	277	N	83	W	19	2.3	305	N	55	W	182	236	8.8	8.8	8	2
4684	23.8	277	N	83	W	37	2.1	305	N	55	W	181	236	8.8	8.8	6	1
4688	25.3	172	S	8	E	10	2.1	302	N	58	W	180	237	8.7	8.7	2	2
4692	31.4	187	S	7	W	53	2.1	298	N	62	W	177	238	8.6	8.7	17	1
4696	15.5	65	N	65	E	0	2.0	295	N	65	W	173	238	8.6	8.7	9	2
4700	29.5	161	S	19	E	0	2.0	292	N	68	W	171	238	8.7	8.8	5	3
4704	10.8	140	S	40	E	62	2.0	288	N	72	W	166	237	8.6	8.7	25	1
4708	11.3	134	S	46	E	55	2.2	290	N	70	W	160	230	8.6	8.7	16	1
4712	32.3	209	S	29	W	14	2.3	291	N	69	W	155	223	8.7	9.0	9	4
4716	21.5	351	N	9	W	18	2.4	291	N	69	W	149	217	8.8	9.0	4	3
4720	13.4	219	S	39	W	100	2.4	295	N	65	W	145	210	8.8	8.8	10	1
4728	19.0	128	S	52	E	10	2.0	298	N	62	W	142	204	8.8	8.8	9	4
4732	.7	9	N	9	E	0	2.1	300	N	60	W	138	197	8.8	8.8	28	1
4736	2.0	274	N	86	W	0	2.1	302	N	58	W	133	191	8.8	8.8	16	2
4740	37.7	84	N	84	E	100	2.1	300	N	60	W	129	188	8.8	8.8	5	2
4744	19.3	279	N	81	W	100	2.1	299	N	61	W	125	186	8.8	8.8	27	1
4748	19.3	276	N	84	W	100	2.0	299	N	61	W	123	183	8.8	8.8	26	1
4752	31.2	98	S	82	E	0	2.1	298	N	62	W	120	181	8.8	8.8	8	1
4764	27.0	221	S	41	W	0	2.1	295	N	65	W	111	176	8.8	8.8	18	3
4784	9.7	288	N	72	W	28	1.6	299	N	61	W	94	154	8.7	8.8	24	1
4788	6.7	231	S	51	W	100	1.6	301	N	59	W	93	152	8.7	8.7	47	2
4792	21.4	161	S	19	E	25	1.6	303	N	57	W	92	149	8.7	8.7	19	2
4796	23.1	156	S	24	E	0	1.8	304	N	56	W	88	143	8.6	8.7	21	2
4800	24.6	129	S	51	E	13	1.9	305	N	55	W	83	137	8.6	8.7	7	1
4804	32.7	340	N	20	W	100	1.9	305	N	55	W	78	132	8.6	8.7	12	2
4808	28.1	313	N	47	W	14	2.0	306	N	54	W	77	130	8.6	8.7	20	2
4812	3.6	315	N	45	W	33	2.1	307	N	53	W	80	133	8.6	8.7	45	4
4816	3.4	268	S	88	W	71	2.0	307	N	53	W	83	135	8.6	8.8	28	3
4820	5.6	317	N	43	W	68	1.7	305	N	55	W	83	137	8.6	8.7	29	4
4824	13.8	266	S	86	W	0	1.7	302	N	58	W	83	141	8.6	8.7	18	3
4828	.3	260	S	80	W	100	1.9	300	N	60	W	83	142	8.6	8.7	43	2
4832	1.0	328	N	32	W	100	1.9	301	N	59	W	84	142	8.6	8.7	43	1
4840	19.4	1	N	1	E	13	1.8	297	N	63	W	85	148	8.5	8.7	24	1
4844	7.5	267	S	87	W	92	1.8	296	N	64	W	80	144	8.6	8.7	27	1
4848	11.1	43	N	43	E	100	1.9	298	N	62	W	74	136	8.6	8.7	9	1
4852	21.3	208	S	28	W	12	2.0	304	N	56	W	72	128	8.6	8.7	12	3
4856	4.6	318	N	42	W	100	2.0	309	N	51	W	74	125	8.7	8.7	33	3
4860	5.5	302	N	58	W	60	2.0	311	N	49	W	76	124	8.7	8.7	25	1
4864	13.5	277	N	83	W	0	2.1	311	N	49	W	76	125	8.7	8.7	10	1

4868	10.4	356	N	4	W	100	2.2	310	N	50	W	78	128	8.6	8.7	22	4
4872	11.5	292	N	68	W	35	2.2	308	N	52	W	80	131	8.7	8.7	25	2
4876	9.6	316	N	44	W	0	2.4	307	N	53	W	79	132	8.6	8.7	40	2
4880	9.4	106	S	74	E	0	2.4	307	N	53	W	78	130	8.6	8.7	24	2
4892	3.9	329	N	31	W	10	2.2	307	N	53	W	79	131	8.5	8.7	23	1
4896	7.2	307	N	53	W	69	2.1	306	N	54	W	80	133	8.5	8.7	26	2
4900	7.2	289	N	71	W	10	2.2	307	N	53	W	80	133	8.5	8.7	38	2
4904	1.5	99	S	81	E	100	2.2	308	N	52	W	80	132	8.5	8.7	26	2
4908	15.5	320	N	40	W	0	2.2	310	N	50	W	81	130	8.5	8.7	27	1
4912	7.6	129	S	51	E	0	2.1	312	N	48	W	83	131	8.6	8.7	28	4
4916	13.8	155	S	25	E	100	2.1	311	N	49	W	84	133	8.6	8.7	16	1
4920	7.3	105	S	75	E	10	2.0	310	N	50	W	84	134	8.5	8.7	26	2
4924	1.3	239	S	59	W	43	2.1	311	N	49	W	84	133	8.5	8.7	29	2
4928	1.4	60	N	60	E	16	2.1	313	N	47	W	85	132	8.5	8.7	28	2
4936	7.2	48	N	48	E	10	2.0	312	N	48	W	88	136	8.5	8.7	14	1
4940	5.6	356	N	4	W	37	1.9	314	N	46	W	90	136	8.5	8.7	34	2
4944	4.3	125	S	55	E	32	1.9	313	N	47	W	91	137	8.5	8.7	29	1
4948	3.5	87	N	87	E	11	2.0	310	N	50	W	90	139	8.5	8.7	37	1
4956	1.8	169	S	11	E	100	2.2	312	N	48	W	89	137	8.5	8.7	25	2
4960	6.2	341	N	19	W	100	2.2	313	N	47	W	89	136	8.5	8.7	45	3
4964	.3	21	N	21	E	100	2.1	316	N	44	W	88	132	8.5	8.7	51	1
4968	3.9	112	S	68	E	21	1.9	317	N	43	W	87	129	8.5	8.7	36	3
4972	2.2	64	N	64	E	100	1.8	319	N	41	W	85	125	8.4	8.8	27	4
4976	2.7	265	S	85	W	10	1.7	318	N	42	W	83	125	8.4	8.7	25	2
4980	2.6	188	S	8	W	13	1.9	317	N	43	W	79	122	8.5	8.7	24	1
4984	4.8	182	S	2	W	10	2.0	318	N	42	W	75	117	8.5	8.7	21	4
4988	4.7	225	S	45	W	46	2.1	319	N	41	W	73	114	8.5	8.7	23	3
4996	15.0	191	S	11	W	10	2.1	321	N	39	W	71	110	8.5	8.7	22	3
5000	2.0	126	S	54	E	13	1.9	323	N	37	W	73	109	8.4	8.7	53	1
5004	2.1	111	S	69	E	19	1.7	323	N	37	W	71	108	8.4	8.7	46	1
5008	4.6	41	N	41	E	0	1.7	324	N	36	W	70	105	8.5	8.7	38	1
5012	18.0	193	S	13	W	0	1.9	326	N	34	W	69	103	8.5	8.7	37	4
5016	9.3	38	N	38	E	72	1.9	324	N	36	W	70	106	8.6	8.7	40	1
5020	3.8	216	S	36	W	100	1.9	323	N	37	W	70	106	8.6	8.7	43	2
5024	2.9	245	S	65	W	100	2.0	324	N	36	W	68	104	8.5	8.7	19	2
5028	6.4	307	N	53	W	100	1.8	324	N	36	W	67	102	8.5	8.7	19	2
5032	32.1	180		SOUTH		0	1.7	322	N	38	W	66	103	8.5	8.7	6	2
5036	24.1	309	N	51	W	100	1.6	328	N	32	W	63	95	8.4	8.8	2	2
5040	38.9	216	S	36	W	100	1.6	343	N	17	W	57	73	8.4	9.2	56	3
5056	31.5	355	N	5	W	10	2.6	349	N	11	W	47	57	8.5	8.7	17	1
5060	22.1	1	N	1	E	0	2.3	341	N	19	W	48	66	8.5	8.7	4	1

REPEAT SECTION

3428	44.5	306	N	54	W	0	3.0	249	S	69	W	234	344	9.1	8.9	11	4
3436	35.5	331	N	29	W	0	3.2	248	S	68	W	243	355	9.1	9.1	20	3
3444	4.4	326	N	34	W	100	2.9	249	S	69	W	262	13	8.9	9.1	21	1
3448	2.5	226	S	46	W	13	2.8	247	S	67	W	269	22	8.8	9.1	50	3
3452	3.3	322	N	38	W	100	2.7	248	S	68	W	277	28	8.9	9.2	64	3
3456	2.2	43	N	43	E	0	2.6	248	S	68	W	280	31	9.2	9.3	53	1
3460	8.0	244	S	64	W	98	2.7	248	S	68	W	282	33	9.4	9.5	8	1
3464	2.8	27	N	27	E	100	2.8	250	S	70	W	287	36	9.4	9.3	55	4

3468	2.3	331	N	29	W	100	2.7	248	S	68	W	291	42	9.2	9.2	52	1
3472	4.7	323	N	37	W	71	2.6	247	S	67	W	294	47	8.9	9.3	67	1
3476	12.9	19	N	19	E	100	2.7	247	S	67	W	302	55	8.7	9.4	70	1
3480	25.8	24	N	24	E	85	2.7	248	S	68	W	315	67	8.8	9.3	28	1
3484	10.3	286	N	74	W	0	2.5	248	S	68	W	325	77	8.8	9.1	17	1
3488	11.7	21	N	21	E	71	2.5	244	S	64	W	332	87	8.8	9.1	41	4
3492	3.6	47	N	47	E	10	2.6	243	S	63	W	336	92	9.0	9.1	34	1
3500	4.1	256	S	76	W	100	2.4	242	S	62	W	341	98	9.1	9.1	51	1
3504	3.7	260	S	80	W	100	2.5	244	S	64	W	343	99	9.2	9.0	54	1
3520	33.1	353	N	7	W	0	2.7	240	S	60	W	347	107	8.9	8.8	9	3
3532	14.9	324	N	36	W	0	3.0	240	S	60	W	355	115	8.7	8.8	17	1
3536	5.0	280	N	80	W	0	3.0	237	S	57	W	360	122	8.7	8.8	9	3
3540	28.5	39	N	39	E	0	3.1	236	S	56	W	2	125	8.8	8.8	11	3
3544	32.7	115	S	65	E	14	2.9	235	S	55	W	2	127	8.7	8.9	13	2
3552	21.8	64	N	64	E	14	3.3	234	S	54	W	2	128	8.8	9.1	10	4
3556	9.1	128	S	52	E	0	3.3	233	S	53	W	2	128	8.8	9.1	6	2
3568	9.0	330	N	30	W	100	3.4	234	S	54	W	1	127	8.7	9.3	57	1
3572	7.1	343	N	17	W	100	3.3	234	S	54	W	2	128	8.7	9.3	73	1
3576	3.7	338	N	22	W	18	3.2	235	S	55	W	3	128	8.8	9.2	71	4
3580	1.9	28	N	28	E	24	3.1	236	S	56	W	6	130	9.1	9.4	70	4
3584	4.8	360		NORTH		100	3.2	237	S	57	W	13	135	9.3	9.6	63	4
3588	4.0	329	N	31	W	0	3.2	236	S	56	W	16	139	9.3	9.5	28	3
3592	5.1	10	N	10	E	100	3.2	236	S	56	W	16	140	9.2	9.3	44	3
3596	5.0	51	N	51	E	100	3.2	237	S	57	W	16	139	9.2	9.4	72	4

REPEAT SECTION

4816	6.7	164	S	16	E	100	1.5	301	N	59	W	89	148	4.5	.4	79	1
4820	7.5	111	S	69	E	15	1.5	300	N	60	W	88	147	4.7	2.8	34	1
4824	6.6	351	N	9	W	65	1.7	299	N	61	W	87	148	5.7	5.7	9	1
4828	2.4	329	N	31	W	11	1.9	296	N	64	W	86	149	7.3	7.3	54	4
4832	2.2	325	N	35	W	11	1.9	298	N	62	W	84	146	8.4	8.4	65	4
4836	22.4	314	N	46	W	100	2.0	299	N	61	W	86	146	8.5	8.8	12	1
4840	3.1	126	S	54	E	0	2.1	296	N	64	W	85	148	8.4	8.8	20	1
4844	11.9	51	N	51	E	0	2.2	295	N	65	W	80	145	8.5	8.7	17	1
4848	8.5	94	S	86	E	10	2.2	298	N	62	W	78	139	8.5	8.7	11	2
4852	9.2	204	S	24	W	28	2.1	305	N	55	W	75	130	8.5	8.8	39	2
4856	8.0	208	S	28	W	41	2.0	309	N	51	W	74	124	8.5	8.7	41	2
4860	4.4	225	S	45	W	19	2.1	312	N	48	W	74	122	8.5	8.7	25	2
4864	3.3	162	S	18	E	0	2.3	313	N	47	W	73	119	8.4	8.7	21	1
4872	2.7	42	N	42	E	100	2.6	309	N	51	W	74	125	8.7	8.8	32	2
4876	2.4	41	N	41	E	13	2.7	308	N	52	W	75	126	8.7	8.8	39	2
4880	28.1	298	N	62	W	0	2.8	310	N	50	W	74	124	8.6	8.8	11	1
4884	31.1	323	N	37	W	19	2.7	310	N	50	W	74	124	8.6	8.8	4	4
4888	31.0	335	N	25	W	0	2.5	310	N	50	W	76	126	8.6	8.8	15	2
4892	5.8	273	N	87	W	100	2.5	309	N	51	W	79	130	8.5	8.8	27	1
4896	5.4	293	N	67	W	46	2.5	307	N	53	W	81	133	8.5	8.8	30	2
4900	3.8	274	N	86	W	23	2.4	309	N	51	W	80	131	8.6	8.8	35	2
4904	3.0	239	S	59	W	100	2.4	311	N	49	W	81	130	8.6	8.7	32	2
4908	12.8	222	S	42	W	22	2.5	311	N	49	W	82	130	8.6	8.8	13	3
4916	6.9	211	S	31	W	20	2.3	312	N	48	W	84	131	8.6	8.8	9	2
4920	2.9	165	S	15	E	13	2.3	311	N	49	W	84	133	8.6	8.8	21	2

4924	7.7	287	N	73	W	100	2.2	312	N	48	W	84	132	8.6	8.7	11	1
4928	6.0	289	N	71	W	0	2.1	312	N	48	W	84	132	8.6	8.7	14	1
4932	2.6	241	S	61	W	100	2.1	312	N	48	W	85	132	8.6	8.7	29	2
4936	2.1	92	S	88	E	100	2.1	313	N	47	W	84	131	8.5	8.7	27	3
4940	2.3	73	N	73	E	100	2.1	314	N	46	W	84	129	8.5	8.7	33	2
4944	3.8	130	S	50	E	11	2.2	315	N	45	W	85	130	8.5	8.7	43	1
4948	5.3	124	S	56	E	14	2.3	311	N	49	W	87	136	8.5	8.7	48	1
4952	5.6	184	S	4	W	45	2.4	312	N	48	W	88	135	8.4	8.7	21	1
4960	3.0	223	S	43	W	12	2.5	313	N	47	W	86	132	8.4	8.8	19	3
4964	2.5	19	N	19	E	20	2.4	316	N	44	W	85	129	8.4	8.8	20	3
4968	4.3	51	N	51	E	69	2.2	319	N	41	W	86	126	8.4	8.8	19	2
4972	4.0	107	S	73	E	27	2.1	320	N	40	W	85	124	8.5	8.8	33	2
4976	5.1	360		NORTH		51	2.0	320	N	40	W	83	122	8.5	8.8	23	2
4980	3.1	242	S	62	W	100	2.1	319	N	41	W	80	120	8.4	8.7	27	1
4984	10.2	48	N	48	E	100	2.2	319	N	41	W	77	117	8.4	8.7	17	4
4988	1.5	14	N	14	E	100	2.2	320	N	40	W	74	113	8.4	8.7	26	2
4992	1.0	173	S	7	E	11	2.2	322	N	38	W	72	110	8.4	8.7	23	2
4996	12.7	27	N	27	E	56	2.2	323	N	37	W	72	108	8.4	8.7	16	4
5000	1.5	21	N	21	E	100	2.3	325	N	35	W	72	106	8.4	8.7	39	1
5004	1.4	5	N	5	E	100	2.0	325	N	35	W	71	106	8.4	8.7	45	1
5008	6.5	42	N	42	E	36	2.0	326	N	34	W	70	104	8.4	8.7	23	2
5020	2.9	247	S	67	W	100	2.0	325	N	35	W	70	104	8.4	8.7	47	2
5024	3.7	234	S	54	W	37	2.1	325	N	35	W	68	102	8.4	8.7	42	2
5028	2.9	219	S	39	W	14	2.1	327	N	33	W	67	100	8.4	8.7	25	1
5040	20.3	228	S	48	W	37	1.8	341	N	19	W	58	76	8.3	9.2	60	3
5048	11.2	357	N	3	W	0	1.9	353	N	7	W	42	48	8.4	8.7	12	1
5052	11.0	243	S	63	W	0	2.0	353	N	7	W	43	49	8.4	8.7	3	2
5056	28.0	226	S	46	W	61	2.1	349	N	11	W	44	54	8.4	8.8	9	1

D-6232

SCHLUMBERGER TAPE DIPMETER

HDT-C 4-ARM DIGITAL MARK IV 6050

PLACID OIL COMPANY
U. S. A. D U NO. 1
RUN NO. ONE

WILDCAT
WAYNE COUNTY, UTAH
9-25-70

CORRELATION LENGTH 8 FT.

INITIAL SEARCH ANGLE 30 DEGREES

DEPTH	DIP	AZM	BRG	QUAL	DEV	AZM	BRG	AZ1	RBR	D-13	D-24	G	NUL
662	5.1	352	N 8 W	32	.5	7	N 7 E	243	236	9.8	11.2	44	1
666	1.9	282	N 78 W	100	.5	4	N 4 E	238	234	9.8	11.1	26	1
670	4.9	347	N 13 W	15	.6	6	N 6 E	231	224	10.0	10.8	52	1
694	3.[illegible]	333	N 27 W	100	.4	15	N 15 E	225	209	9.8	10.0	31	2
698	.9	235	S 55 W	12	.4	15	N 15 E	223	207	9.7	9.8	62	1
702	2.0	244	S 64 W	100	.3	15	N 15 E	222	207	9.5	9.8	70	1
706	12.0	177	S 3 E	100	.3	16	N 16 E	223	207	9.5	9.8	53	1
710	11.6	177	S 3 E	100	.3	18	N 18 E	225	207	9.5	9.8	50	1
714	3.4	267	S 87 W	100	.3	22	N 22 E	228	205	9.5	9.7	75	2
718	5.8	214	S 34 W	100	.3	28	N 28 E	228	200	9.4	9.7	70	1
722	7.5	229	S 49 W	65	.4	30	N 30 E	226	195	9.5	9.7	83	1
726	2.7	332	N 28 W	23	.3	33	N 33 E	220	186	9.7	9.6	75	1
730	1.7	28	N 28 E	100	.2	47	N 47 E	211	164	9.8	9.5	65	2
734	3.6	318	N 42 W	100	.2	56	N 56 E	205	149	9.7	9.3	78	2
738	3.4	305	N 55 W	100	.2	57	N 57 E	204	147	9.7	9.2	74	4
742	2.6	303	N 57 W	28	.3	57	N 57 E	205	147	9.8	9.4	79	4
746	3.4	249	S 69 W	10	.2	62	N 62 E	208	146	9.9	9.5	81	4
750	2.7	30	N 30 E	18	.2	70	N 70 E	210	139	10.0	9.7	66	4
754	10.0	15	N 15 E	100	.1	75	N 75 E	206	130	10.1	9.9	63	4
758	11.9	225	S 45 W	16	.0	0		200	117	10.1	10.0	44	2
762	6.9	187	S 7 W	21	.0	0		186	97	10.0	9.9	40	2
766	20.3	209	S 29 W	22	.0	0		171	79	9.7	9.8	34	2
770	4.3	164	S 16 E	0	.2	94	S 86 E	164	70	9.5	9.7	53	1
774	4.2	240	S 60 W	100	.2	86	N 86 E	157	71	9.3	9.7	83	1
778	8.4	152	S 28 E	30	.2	80	N 80 E	152	71	9.0	9.6	92	4
782	2.5	199	S 19 W	100	.2	77	N 77 E	147	70	8.7	9.5	60	4
786	1.8	302	N 58 W	100	.1	73	N 73 E	143	70	8.9	9.4	81	4
790	5.2	285	N 75 W	100	.0	0		138	67	8.9	9.2	77	3
794	3.9	224	S 44 W	100	.1	78	N 78 E	131	53	8.9	9.2	66	3
798	2.1	242	S 62 W	100	.1	86	N 86 E	125	38	9.0	9.3	63	3
802	2.0	252	S 72 W	100	.0	0		120	35	9.3	9.6	85	3
806	1.0	266	S 86 W	100	.0	0		113	32	9.6	9.7	81	3
810	.8	185	S 5 W	13	.2	74	N 74 E	105	31	9.6	9.8	93	2
814	7.6	84	N 84 E	31	.3	67	N 67 E	99	31	9.5	9.8	91	2
822	3.1	281	N 79 W	51	.2	68	N 68 E	93	24	9.4	9.8	59	3
826	1.7	165	S 15 E	100	.2	68	N 68 E	91	22	9.5	9.7	74	2
830	2.1	159	S 21 E	100	.2	67	N 67 E	87	19	9.5	9.6	85	2
834	2.3	296	N 64 W	25	.2	68	N 68 E	83	14	9.5	9.6	85	2
838	2.5	288	N 72 W	100	.3	73	N 73 E	80	6	9.3	9.4	82	2

842	3.3	275	N	85	W	100	.2	75	N	75	E	77	2	9.2	9.3	88	1
846	2.1	280	N	80	W	16	.3	75	N	75	E	76	0	9.4	9.5	75	1
858	1.1	242	S	62	W	100	.2	66	N	66	E	70	3	9.4	9.4	51	1
862	.9	288	N	72	W	17	.3	63	N	63	E	68	4	9.4	9.5	56	1
866	.4	96	S	84	E	11	.3	61	N	61	E	64	2	9.4	9.5	31	1
870	1.2	111	S	69	E	100	.3	60	N	60	E	55	355	9.3	9.5	52	1
874	3.9	171	S	9	E	100	.4	60	N	60	E	47	346	9.2	9.5	81	4
878	4.1	146	S	34	E	100	.4	58	N	58	E	41	342	9.2	9.5	90	4
882	12.1	137	S	43	E	49	.3	55	N	55	E	36	341	9.4	9.5	91	4
886	7.5	332	N	28	W	0	.2	49	N	49	E	29	339	9.4	9.6	64	3
890	6.3	359	N	1	W	36	.2	46	N	46	E	22	335	9.4	9.7	60	1
894	10.7	66	N	66	E	13	.3	47	N	47	E	18	331	9.2	9.6	71	1
902	2.7	16	N	16	E	100	.4	49	N	49	E	12	323	9.0	9.4	25	4
906	9.2	9	N	9	E	0	.3	49	N	49	E	4	314	9.0	9.4	16	1
910	9.1	235	S	55	W	0	.3	48	N	48	E	358	309	9.0	9.4	12	3
914	.5	63	N	63	E	0	.3	45	N	45	E	350	305	9.0	9.4	36	3
918	.6	105	S	75	E	100	.3	39	N	39	E	340	300	9.2	9.5	78	4
922	.8	207	S	27	W	100	.3	36	N	36	E	329	293	9.5	9.6	68	4
926	3.9	197	S	17	W	66	.3	37	N	37	E	321	284	9.7	9.7	44	4
930	4.6	8	N	8	E	45	.3	36	N	36	E	310	274	9.8	9.8	34	4
934	4.2	269	S	89	W	100	.3	33	N	33	E	301	268	9.8	9.8	61	1
938	2.0	73	N	73	E	0	.3	32	N	32	E	299	266	9.8	9.8	68	1
942	8.6	279	N	81	W	80	.4	32	N	32	E	298	266	9.6	9.7	69	2
946	1.0	233	S	53	W	100	.4	32	N	32	E	298	266	9.5	9.7	78	2
950	1.2	244	S	64	W	100	.3	31	N	31	E	298	266	9.4	9.7	69	1
954	.9	223	S	43	W	100	.3	30	N	30	E	297	267	9.2	9.5	69	3
958	2.8	280	N	80	W	100	.3	29	N	29	E	296	267	9.1	9.6	85	2
962	3.2	279	N	81	W	100	.3	28	N	28	E	295	267	9.1	9.5	82	2
966	10.7	317	N	43	W	100	.4	28	N	28	E	295	266	8.8	9.2	62	1
970	14.1	183	S	3	W	87	.4	28	N	28	E	294	266	8.6	9.1	74	2
974	19.4	178	S	2	E	100	.3	29	N	29	E	295	266	8.6	9.2	76	1
978	19.5	170	S	10	E	14	.3	31	N	31	E	297	265	8.7	9.3	70	1
982	.8	197	S	17	W	10	.3	32	N	32	E	297	265	8.9	9.5	59	4
986	18.1	262	S	82	W	14	.4	31	N	31	E	296	265	9.1	9.7	63	3
990	15.3	302	N	58	W	100	.3	30	N	30	E	296	265	9.1	9.8	42	3
1018	13.6	100	S	80	E	10	.3	39	N	39	E	284	245	8.9	9.5	55	4
1022	17.9	221	S	41	W	0	.3	32	N	32	E	277	244	8.6	9.2	53	3
1026	4.8	119	S	61	E	100	.2	30	N	30	E	275	244	8.5	9.0	33	2
1030	8.9	272	N	88	W	21	.3	35	N	35	E	273	237	8.5	8.9	49	1
1034	2.1	240	S	60	W	15	.2	41	N	41	E	272	231	8.6	8.6	27	1
1038	2.1	234	S	54	W	100	.2	39	N	39	E	272	232	8.6	8.8	73	4
1042	6.5	200	S	20	W	100	.3	21	N	21	E	270	248	8.5	8.9	77	4
1046	14.8	281	N	79	W	30	.2	4	N	4	E	267	263	8.7	9.1	65	3
1050	9.2	242	S	62	W	10	.1	360		NORTH		265	264	8.9	9.5	74	4
1054	1.7	284	N	76	W	12	.1	11	N	11	E	264	252	8.9	9.7	80	1
1058	4.3	307	N	53	W	100	.2	26	N	26	E	262	235	9.0	9.8	71	2
1062	8.1	335	N	25	W	40	.2	32	N	32	E	261	228	9.1	10.0	53	2
1066	8.6	337	N	23	W	55	.2	33	N	33	E	261	227	9.2	10.1	32	2
1074	3.4	330	N	30	W	100	.0	0				261	229	9.4	10.0	25	2
1082	.6	335	N	25	W	100	.1	32	N	32	E	260	228	9.1	9.8	44	2
1090	6.4	195	S	15	W	21	.0	0				258	232	9.0	9.4	74	2
1094	1.1	338	N	22	W	100	.0	0				257	249	8.7	9.1	77	2
1094	1.1	338	N	22	W	100	.0	0				257	249	8.7	9.1	77	2
1102	4.4	125	S	55	E	10	.2	354	N	6	W	256	262	8.5	9.0	50	3

1106	1.0	309	N	51	W	22	.0	0			256	247	8.6	8.8	60	2
1110	2.9	319	N	41	W	22	.1	24	N	24 E	256	231	8.6	8.8	56	2
1114	6.2	341	N	19	W	58	.2	32	N	32 E	256	223	8.7	9.0	60	1
1118	7.5	342	N	18	W	100	.1	26	N	26 E	256	229	8.9	9.2	60	3
1122	4.9	333	N	27	W	70	.0	0			255	251	9.0	9.2	66	3
1130	3.8	160	S	20	E	35	.0	0			255	262	9.4	9.6	50	4
1134	7.4	205	S	25	W	89	.0	0			255	263	9.6	9.8	32	4
1146	3.2	274	N	86	W	27	.1	353	N	7 W	256	262	9.3	9.4	43	4
1150	2.6	1	N	1	E	100	.1	354	N	6 W	256	262	9.1	9.4	49	2
1154	8.8	212	S	32	W	0	.1	354	N	6 W	256	261	9.1	9.3	35	3
1158	6.8	45	N	45	E	10	.2	354	N	6 W	256	261	9.1	9.2	26	2
1162	23.8	208	S	28	W	0	.3	353	N	7 W	256	262	9.0	9.3	24	2
1170	4.3	114	S	66	E	16	.2	15	N	15 E	255	240	8.9	9.4	35	2

1206	22.8	21	N	21	E	0	.0	0			228	223	8.7	9.2	9	1
1210	18.6	252	S	72	W	100	.0	0			224	211	8.8	9.2	6	3
1214	3.5	266	S	86	W	21	.1	18	N	18 E	220	201	8.7	9.1	26	1
1218	2.7	8	N	8	E	100	.1	24	N	24 E	217	193	8.7	9.2	40	1
1222	3.6	333	N	27	W	32	.2	26	N	26 E	215	188	8.7	9.3	52	4
1226	2.0	261	S	81	W	12	.2	36	N	36 E	212	176	8.7	9.4	24	3
1234	23.7	119	S	61	E	0	.0	0			205	155	8.7	9.3	9	3
1238	20.4	269	S	89	W	38	.0	0			202	155	8.7	9.2	13	2
1242	17.4	305	N	55	W	17	.1	46	N	46 E	202	155	8.8	9.4	28	1
1246	1.1	269	S	89	W	0	.1	41	N	41 E	202	161	9.0	9.5	39	3
1250	6.9	267	S	87	W	44	.2	35	N	35 E	204	168	8.9	9.5	28	4
1254	31.2	334	N	26	W	13	.1	36	N	36 E	204	168	8.7	9.5	18	4
1258	1.2	159	S	21	E	100	.0	0			203	148	8.7	9.4	41	1
1262	14.9	323	N	37	W	21	.0	0			202	129	8.7	9.4	68	4
1266	3.5	328	N	32	W	100	.0	0			200	127	8.8	9.4	85	4
1270	6.2	106	S	74	E	38	.0	0			199	125	8.9	9.2	83	4
1274	3.1	121	S	59	E	10	.0	0			197	125	8.8	9.3	47	1
1278	4.2	14	N	14	E	0	.0	0			196	126	8.9	9.4	45	1
1282	20.1	239	S	59	W	100	.1	66	N	66 E	194	127	9.0	9.4	64	4
1286	3.8	236	S	56	W	15	.1	61	N	61 E	190	128	9.2	9.6	70	4
1290	2.7	241	S	61	W	100	.1	56	N	56 E	186	129	9.4	9.8	79	4
1294	3.3	235	S	55	W	100	.1	54	N	54 E	182	128	9.4	9.8	79	3
1298	1.6	182	S	2	W	22	.0	0			181	128	9.6	9.9	66	3
1302	3.8	177	S	3	E	100	.1	52	N	52 E	180	128	9.8	10.1	73	1
1306	3.1	172	S	8	E	0	.2	53	N	53 E	180	127	9.8	10.1	48	1
1310	5.1	307	N	53	W	10	.3	55	N	55 E	182	126	9.8	10.1	53	1
1314	2.1	325	N	35	W	12	.3	54	N	54 E	185	130	9.6	10.0	56	1
1318	5.6	27	N	27	E	67	.2	52	N	52 E	186	134	9.6	9.8	78	2
1322	16.9	234	S	54	W	0	.2	56	N	56 E	186	130	9.4	9.6	71	1
1326	4.8	320	N	40	W	100	.2	61	N	61 E	185	123	9.0	9.4	70	1
1330	3.5	333	N	27	W	53	.3	63	N	63 E	183	120	9.7	9.7	76	3
1338	11.0	90		EAST		100	.3	60	N	60 E	190	129	8.9	9.9	61	2
1342	3.5	165	S	15	E	70	.2	51	N	51 E	195	143	9.0	9.6	74	1
1346	4.8	45	N	45	E	100	.2	47	N	47 E	188	141	9.0	9.5	79	2
1350	4.9	32	N	32	E	100	.2	55	N	55 E	178	122	8.8	9.4	55	3
1354	9.3	264	S	84	W	100	.2	69	N	69 E	174	105	8.8	9.4	56	4
1358	16.9	163	S	17	E	10	.0	0			173	95	9.0	9.6	40	4
1378	3.5	317	N	43	W	100	.1	73	N	73 E	168	94	9.0	9.4	51	3

1382	3.9	281	N	79	W	100	.2	79	N	79	E	163	83	9.0	9.5	45	4
1386	3.8	300	N	60	W	16	.2	86	N	86	E	156	69	9.3	9.7	21	4
1390	4.0	279	N	81	W	50	.2	83	N	83	E	149	65	9.4	9.7	31	2
1394	5.1	277	N	83	W	63	.2	79	N	79	E	144	65	9.5	9.7	68	2
1398	3.1	309	N	51	W	0	.2	81	N	81	E	139	58	9.7	9.8	84	2
1402	2.8	298	N	62	W	100	.2	81	N	81	E	132	51	9.8	9.8	58	2
1406	3.0	39	N	39	E	29	.3	78	N	78	E	126	47	9.8	9.8	57	2
1410	2.6	103	S	77	E	32	.4	79	N	79	E	122	42	9.7	9.7	70	1
1414	4.9	128	S	52	E	100	.3	82	N	82	E	118	35	9.6	9.5	76	1
1418	14.9	77	N	77	E	54	.4	91	S	89	E	114	22	9.4	9.4	68	4
1426	13.5	359	N	1	W	100	.3	100	S	80	E	112	12	8.8	9.4	52	4
1430	8.8	89	N	89	E	18	.4	97	S	83	E	113	16	8.8	9.4	54	1
1434	20.8	164	S	16	E	0	.4	90		EAST		115	25	9.2	9.5	83	2
1438	6.1	175	S	5	E	46	.4	82	N	82	E	117	35	9.4	9.8	58	1
1442	7.8	173	S	7	E	71	.4	74	N	74	E	119	45	9.4	10.0	66	1
1446	12.4	251	S	71	W	94	.4	72	N	72	E	122	49	9.4	9.9	74	3
1450	13.5	157	S	23	E	84	.5	73	N	73	E	122	48	9.4	9.8	71	3
1454	18.9	117	S	63	E	30	.5	75	N	75	E	122	46	9.4	9.7	67	1
1458	12.7	345	N	15	W	18	.5	79	N	79	E	122	42	9.2	9.6	72	4
1462	13.5	31	N	31	E	100	.4	81	N	81	E	122	40	9.1	9.4	80	3
1466	11.6	39	N	39	E	100	.5	81	N	81	E	122	41	9.0	9.4	36	3
1470	3.7	21	N	21	E	16	.5	80	N	80	E	122	42	8.9	9.4	92	3
1474	4.9	353	N	7	W	0	.5	78	N	78	E	123	44	8.7	9.1	92	3
1478	5.5	298	N	62	W	100	.5	79	N	79	E	123	44	8.7	9.0	91	4
1482	3.4	325	N	35	W	23	.4	83	N	83	E	123	40	8.7	9.1	98	1
1486	4.7	300	N	60	W	100	.4	87	N	87	E	125	37	8.7	9.4	96	1
1490	5.2	343	N	17	W	17	.3	90		EAST		127	36	8.9	9.6	79	1
1494	2.2	338	N	22	W	100	.3	91	S	89	E	130	39	8.9	9.5	71	4
1498	.7	347	N	13	W	100	.3	87	N	87	E	132	44	8.7	9.3	69	1
1506	17.0	2	N	2	E	100	.4	83	N	83	E	133	49	8.8	9.5	45	4
1510	7.6	176	S	4	E	11	.3	84	N	84	E	133	49	9.0	9.6	43	1
1514	15.6	97	S	83	E	10	.3	87	N	87	E	133	45	9.1	9.6	50	4
1518	7.7	189	S	9	W	15	.3	93	S	87	E	133	40	9.3	10.0	46	4
1522	6.1	92	S	88	E	22	.3	94	S	86	E	132	38	9.4	10.0	62	3
1526	10.7	103	S	77	E	33	.3	90		EAST		133	43	9.4	9.8	62	3
1530	4.4	156	S	24	E	98	.2	89	N	89	E	135	45	9.4	9.8	23	3
1534	11.7	86	N	86	E	39	.2	94	S	86	E	136	42	9.4	9.7	33	3
1538	2.5	19	N	19	E	100	.2	99	S	81	E	138	39	9.4	9.7	59	1
1542	3.0	41	N	41	E	26	.2	99	S	81	E	137	38	9.2	9.6	65	4
1546	4.2	143	S	37	E	34	.2	100	S	80	E	134	34	9.0	9.7	78	1
1550	2.5	121	S	59	E	100	.2	100	S	80	E	133	33	8.8	9.6	83	1
1554	2.9	108	S	72	E	100	.3	96	S	84	E	132	36	8.7	9.2	82	1
1558	1.1	101	S	79	E	100	.3	89	N	89	E	130	40	8.6	8.9	58	3
1562	2.8	74	N	74	E	100	.3	83	N	83	E	128	44	8.6	8.9	81	4
1566	8.3	142	S	38	E	19	.1	85	N	85	E	125	39	8.7	9.0	85	1
1570	10.7	154	S	26	E	100	.0	0				124	34	8.7	8.9	81	4
1574	7.2	164	S	16	E	48	.0	0				123	11	8.7	8.9	50	4
1578	6.3	175	S	5	E	100	.0	0				123	344	8.7	9.2	73	1
1582	23.5	138	S	42	E	87	.1	135	S	45	E	122	347	8.7	9.3	71	2
1586	4.5	336	N	24	W	18	.2	119	S	61	E	122	2	8.9	9.4	52	3
1590	1.9	213	S	33	W	22	.2	108	S	72	E	122	13	9.0	9.4	66	1
1594	8.9	172	S	8	E	21	.3	99	S	81	E	121	21	9.0	9.4	44	1
1598	14.6	275	N	85	W	34	.2	92	S	88	E	121	29	8.9	9.3	38	1
1602	.9	296	N	64	W	0	.2	86	N	86	E	121	34	8.8	9.1	51	1

1606	.6	321	N	39	W	11	.2	85	N	85	E	121	35	8.8	9.2	57	1
1610	3.9	150	S	30	E	10	.1	96	S	84	E	121	24	9.0	9.4	58	4
1614	8.3	232	S	52	W	17	.1	110	S	70	E	120	10	9.2	9.4	40	1
1622	9.9	83	N	83	E	0	.2	130	S	50	E	118	347	8.8	9.1	50	3
1630	9.8	356	N	4	W	14	.3	113	S	67	E	116	3	8.7	9.1	42	2
1634	18.1	191	S	11	W	80	.3	111	S	69	E	115	4	8.6	9.2	38	1
1638	38.3	166	S	14	E	28	.3	108	S	72	E	114	6	8.6	9.2	37	4
1642	9.3	283	N	77	W	24	.2	103	S	77	E	113	9	8.6	9.2	23	1
1646	7.1	263	S	83	W	12	.2	100	S	80	E	111	11	8.7	9.3	41	1
1654	4.1	246	S	66	W	100	.3	99	S	81	E	109	10	8.8	9.4	77	1
1662	4.6	280	N	80	W	100	.6	100	S	80	E	106	5	8.9	9.6	89	3
1670	16.1	354	N	6	W	42	.3	104	S	76	E	106	2	8.7	9.4	47	2
1674	3.7	280	N	80	W	100	.3	101	S	79	E	108	6	8.9	9.6	65	2
1678	9.5	345	N	15	W	73	.3	101	S	79	E	113	11	8.9	9.7	75	1
1682	16.7	350	N	10	W	100	.3	101	S	79	E	117	15	8.7	9.5	83	1
1686	5.9	44	N	44	E	36	.3	100	S	80	E	117	17	8.8	9.4	76	2
1690	4.7	341	N	19	W	100	.4	99	S	81	E	117	17	8.8	9.3	79	4
1694	3.1	341	N	19	W	11	.3	98	S	82	E	117	18	8.7	9.0	84	4
1698	2.7	44	N	44	E	100	.3	96	S	84	E	117	21	8.7	8.8	71	4
1702	11.5	323	N	37	W	52	.3	98	S	82	E	119	21	8.7	8.8	62	4
1706	15.1	317	N	43	W	100	.4	98	S	82	E	120	21	8.6	8.8	57	3
1710	4.0	282	N	78	W	0	.4	91	S	89	E	121	29	8.6	8.8	70	3
1714	13.3	260	S	80	W	64	.3	88	N	88	E	122	33	8.6	8.8	72	2
1718	12.8	295	N	65	W	94	.4	88	N	88	E	122	34	8.7	9.1	95	4
1722	6.4	340	N	20	W	31	.4	82	N	82	E	122	40	8.8	9.6	93	4
1726	1.2	240	S	60	W	14	.2	90		EAST		123	32	9.0	9.8	73	4
1730	2.3	287	N	73	W	0	.3	110	S	70	E	124	14	9.1	9.7	64	4
1734	3.1	358	N	2	W	100	.3	121	S	59	E	126	4	9.0	9.8	55	4
1738	14.1	339	N	21	W	100	.3	125	S	55	E	130	4	9.0	9.8	81	4
1742	15.1	342	N	18	W	100	.3	127	S	53	E	133	6	9.0	9.8	88	4
1746	3.2	347	N	13	W	11	.3	128	S	52	E	133	4	9.0	9.7	72	1
1750	3.3	139	S	41	E	20	.4	128	S	52	E	132	4	8.9	9.7	71	1
1754	3.0	355	N	5	W	10	.3	124	S	56	E	132	7	8.8	9.6	79	3
1758	4.0	104	S	76	E	100	.2	123	S	57	E	132	8	8.7	9.6	81	4
1762	7.0	293	N	67	W	51	.2	126	S	54	E	132	5	8.7	9.6	85	4
1766	4.3	311	N	49	W	100	.2	128	S	52	E	133	4	8.8	9.5	70	4
1770	2.5	353	N	7	W	29	.2	134	S	46	E	136	2	9.0	9.7	76	4
1774	2.1	103	S	77	E	100	.2	144	S	36	E	141	357	9.3	9.8	79	1
1778	1.7	322	N	38	W	100	.3	149	S	31	E	144	354	9.4	9.8	82	4
1782	1.5	40	N	40	E	100	.3	152	S	28	E	144	352	9.4	9.7	66	1
1786	3.1	68	N	68	E	100	.2	156	S	24	E	145	348	9.2	9.6	79	1
1790	3.4	88	N	88	E	100	.2	160	S	20	E	144	344	9.0	9.3	86	1
1794	6.6	336	N	24	W	100	.2	160	S	20	E	144	344	8.8	9.1	53	1
1798	7.4	328	N	32	W	40	.2	160	S	20	E	143	343	8.7	9.1	3	1
1802	9.1	277	N	83	W	100	.2	161	S	19	E	142	341	8.7	9.0	76	1
1806	7.7	286	N	74	W	100	.3	162	S	18	E	142	340	8.7	9.0	83	1
1810	4.2	277	N	83	W	60	.3	162	S	18	E	141	338	8.7	9.1	80	1
1818	15.7	53	N	53	E	100	.3	156	S	24	E	134	337	8.8	9.2	11	1
1822	1.9	71	N	71	E	10	.2	153	S	27	E	131	337	8.8	9.1	45	1
1826	3.0	104	S	76	E	15	.3	150	S	30	E	128	338	8.8	9.1	36	3
1830	9.5	175	S	5	E	0	.3	149	S	31	E	126	337	8.8	9.2	25	2
1834	5.4	348	N	12	W	0	.3	147	S	33	E	125	337	8.7	9.1	39	1
1862	9.1	172	S	8	E	82	.4	151	S	29	E	116	325	8.7	9.1	0	1
1866	16.9	47	N	47	E	22	.3	149	S	31	E	115	326	8.7	9.1	58	1

1870	3.3	343	N	17	W	11	.2	151	S	29	E	115	323	9.0	9.4	95	4
1874	.9	279	N	81	W	100	.2	154	S	26	E	115	320	9.5	9.7	86	4
1878	1.1	214	S	34	W	100	.2	157	S	23	E	115	317	9.7	9.7	62	4
1882	3.5	151	S	29	E	100	.3	159	S	21	E	115	315	9.8	9.8	60	1
1886	3.3	181	S	1	W	44	.3	160	S	20	E	114	314	9.8	9.8	46	1
1890	10.1	310	N	50	W	23	.3	159	S	21	E	115	315	9.8	9.8	44	1
1894	1.1	230	S	50	W	100	.3	159	S	21	E	118	318	9.8	9.7	71	1
1898	.7	275	N	85	W	100	.3	163	S	17	E	125	322	9.7	9.7	48	1
1902	.6	295	N	65	W	100	.2	166	S	14	E	131	324	9.5	9.6	51	1
1906	1.4	359	N	1	W	100	.3	171	S	9	E	136	324	9.4	9.5	53	2
1910	.9	86	N	86	E	100	.3	173	S	7	E	137	324	9.4	9.5	77	2
1914	1.4	36	N	36	E	10	.3	173	S	7	E	136	322	9.2	9.5	78	1
1934	2.2	186	S	6	W	0	.3	168	S	12	E	123	315	8.8	8.9	15	2
1938	4.2	124	S	56	E	10	.1	175	S	5	E	120	304	8.8	9.0	11	2
1942	3.9	47	N	47	E	0	.2	180	SOUTH			117	296	8.7	9.1	10	3
1946	19.1	26	N	26	E	0	.2	178	S	2	E	114	295	8.7	9.1	5	3
1950	27.6	358	N	2	W	0	.2	175	S	5	E	110	294	8.8	9.1	18	3
1954	16.6	306	N	54	W	100	.3	170	S	10	E	105	294	8.7	9.1	22	3
1956	6.2	55	N	55	E	20	.0	0				316	169	8.8	9.1	53	4
1960	8.6	87	N	87	E	24	.2	135	S	45	E	314	179	9.0	9.2	48	1
1964	18.3	269	S	89	W	0	.2	131	S	49	E	312	180	9.0	9.2	49	4
1968	11.4	18	N	18	E	0	.2	128	S	52	E	310	181	9.0	9.3	21	2
1976	9.0	316	N	44	W	0	.2	123	S	57	E	305	182	8.8	9.1	31	2
1980	3.6	281	N	79	W	100	.1	132	S	48	E	302	170	8.8	9.1	65	2
1984	1.6	351	N	9	W	100	.1	158	S	22	E	299	141	8.8	9.1	71	1
1996	19.3	318	N	42	W	0	.1	169	S	11	E	292	122	8.6	9.1	11	2
2016	20.7	275	N	85	W	87	.2	157	S	23	E	278	121	8.8	9.1	24	2
2020	27.7	89	N	89	E	0	.2	153	S	27	E	274	121	8.9	9.2	25	1
2024	31.6	324	N	36	W	0	.1	151	S	29	E	272	121	9.1	9.4	79	1
2028	15.3	313	N	47	W	10	.1	149	S	31	E	271	121	9.1	9.6	68	4
2032	.8	208	S	28	W	100	.1	148	S	32	E	269	121	9.1	9.7	40	2
2036	11.8	256	S	76	W	100	.1	147	S	33	E	267	120	9.1	9.7	34	1
2040	3.2	254	S	74	W	100	.0	0				266	120	9.0	9.7	52	1
2044	3.0	230	S	50	W	100	.0	0				265	120	9.0	9.6	67	1
2048	1.8	102	S	78	E	0	.0	0				264	120	9.0	9.4	34	2
2052	2.0	316	N	44	W	19	.0	0				263	120	9.0	9.2	57	1
2056	1.8	322	N	38	W	10	.1	140	S	40	E	260	120	9.0	9.2	54	1
2060	6.0	308	N	52	W	10	.2	135	S	45	E	256	120	9.0	9.4	35	1
2064	3.4	278	N	82	W	60	.2	131	S	49	E	252	120	9.0	9.5	29	1
2068	8.0	270	WEST			17	.2	126	S	54	E	248	122	9.0	9.4	57	1
2072	8.2	329	N	31	W	100	.1	120	S	60	E	246	125	9.0	9.3	64	4
2076	6.0	9	N	9	E	0	.0	0				245	129	8.9	9.3	77	2
2084	1.9	195	S	15	W	13	.0	0				241	149	8.7	9.1	56	1
2088	5.9	123	S	57	E	100	.0	0				240	138	8.7	9.1	56	2
2092	5.4	127	S	53	E	100	.1	117	S	63	E	238	121	8.7	9.1	67	2
2096	4.5	109	S	71	E	13	.1	116	S	64	E	237	120	8.9	9.2	86	2
2100	.4	335	N	25	W	100	.1	115	S	65	E	236	120	9.0	9.3	66	2
2104	1.0	320	N	40	W	16	.2	115	S	65	E	236	120	8.9	9.3	63	1
2108	7.0	295	N	65	W	16	.2	114	S	66	E	235	121	8.8	9.2	34	2
2120	3.7	76	N	76	E	18	.2	142	S	38	E	232	90	8.9	9.5	62	3
2124	1.4	298	N	62	W	100	.2	149	S	31	E	233	83	8.8	9.2	71	1
2128	2.8	150	S	30	E	0	.2	151	S	29	E	232	81	8.7	9.1	64	1
2132	10.1	360	NORTH			100	.2	138	S	42	E	231	92	8.7	9.1	75	1
2136	1.1	290	N	70	W	100	.2	127	S	53	E	229	102	8.7	9.1	78	1

2140	1.3	85	N	85	E	100	.2	124	S	56	E	228	104	8.6	9.1	63	1
2144	2.0	105	S	75	E	100	.2	130	S	50	E	227	97	8.6	9.1	44	1
2148	31.3	251	S	71	W	0	.3	136	S	44	E	226	89	8.6	9.1	38	1
2152	28.0	287	N	73	W	100	.2	137	S	43	E	225	88	8.6	9.1	21	4
2164	16.4	2	N	2	E	10	.2	133	S	47	E	219	85	8.8	9.1	18	4
2168	2.5	341	N	19	W	100	.3	131	S	49	E	218	86	8.8	9.1	94	1
2172	2.5	350	N	10	W	100	.3	130	S	50	E	217	86	8.8	9.1	93	2
2176	21.3	173	S	7	E	0	.3	129	S	51	E	217	87	8.8	9.1	30	1
2180	49.0	3	N	3	E	22	.3	132	S	48	E	216	83	8.9	9.1	18	3
2184	20.3	345	N	15	W	43	.2	139	S	41	E	214	75	9.0	9.2	33	2
2204	10.4	135	S	45	E	24	.2	156	S	24	E	207	51	9.0	9.1	10	1
2216	8.8	50	N	50	E	19	.2	177	S	3	E	201	24	8.8	9.1	16	2
2220	9.0	134	S	46	E	21	.3	180		SOUTH		200	19	8.7	9.2	8	2
2224	9.6	44	N	44	E	0	.3	176	S	4	E	198	22	8.6	9.1	15	2
2228	4.6	286	N	74	W	14	.3	164	S	16	E	196	32	8.6	9.1	9	2
2240	20.3	189	S	9	W	100	.3	159	S	21	E	186	27	8.7	9.1	15	4
2244	24.7	82	N	82	E	66	.3	157	S	23	E	183	25	8.6	9.1	15	3
2264	4.6	27	N	27	E	100	.3	171	S	9	E	172	1	8.6	9.1	83	1
2268	3.7	334	N	26	W	100	.4	172	S	8	E	172	359	8.6	9.1	78	2
2272	4.4	330	N	30	W	100	.4	172	S	8	E	171	359	8.6	9.1	75	2
2276	19.6	193	S	13	W	95	.4	170	S	10	E	171	0	8.8	9.1	29	2
2280	25.3	95	S	85	E	10	.4	169	S	11	E	170	1	9.0	9.1	24	3
2284	21.4	86	N	86	E	31	.3	168	S	12	E	169	0	8.9	9.2	35	2
2288	49.7	27	N	27	E	0	.3	172	S	8	E	168	355	8.8	9.1	24	2
2292	28.0	220	S	40	W	100	.3	178	S	2	E	168	349	8.8	9.1	53	4
2296	26.0	297	N	63	W	0	.3	181	S	1	W	167	346	8.8	9.1	26	1
2300	31.0	214	S	34	W	13	.3	181	S	1	W	166	345	8.8	9.1	22	4
2304	30.8	214	S	34	W	11	.3	179	S	1	E	167	347	8.8	9.1	24	4
2312	39.4	280	N	80	W	100	.3	168	S	12	E	168	359	8.7	9.1	12	2
2324	7.2	27	N	27	E	10	.3	167	S	13	E	170	3	8.6	9.1	7	2
2328	25.5	76	N	76	E	100	.3	169	S	11	E	170	0	8.6	9.2	13	3
2336	14.7	35	N	35	E	11	.2	172	S	8	E	166	354	8.9	9.2	17	2
2344	27.6	89	N	89	E	100	.3	162	S	18	E	156	354	8.9	9.2	19	2
2348	21.9	287	N	73	W	0	.2	152	S	28	E	152	0	8.7	9.1	22	1
2352	14.6	200	S	20	W	100	.3	153	S	27	E	150	356	8.7	9.1	16	2
2356	24.6	186	S	6	W	53	.3	157	S	23	E	147	350	8.6	9.1	0	2
2360	3.5	126	S	54	E	0	.3	161	S	19	E	144	342	8.6	9.1	11	4
2368	32.1	72	N	72	E	18	.4	180		SOUTH		138	318	8.7	9.2	13	4
2372	3.1	53	N	53	E	12	.4	176	S	4	E	133	317	8.7	9.2	12	2
2376	41.1	247	S	67	W	100	.4	171	S	9	E	129	318	8.8	9.2	5	1
2384	5.4	213	S	33	W	12	.3	157	S	23	E	123	326	8.8	9.1	16	4
2392	4.2	341	N	19	W	100	.4	159	S	21	E	120	321	8.8	9.1	18	2
2396	4.1	356	N	4	W	49	.4	160	S	20	E	118	317	8.8	9.1	13	2
2400	4.2	266	S	86	W	100	.4	159	S	21	E	116	316	8.8	9.2	17	4
2404	34.8	69	N	69	E	10	.3	158	S	22	E	113	315	8.7	9.2	25	1
2408	42.9	215	S	35	W	0	.3	155	S	25	E	110	315	8.6	9.2	14	2
2412	39.3	206	S	26	W	0	.4	151	S	29	E	106	315	8.7	9.2	13	2
2420	23.5	237	S	57	W	44	.3	146	S	34	E	102	315	8.8	9.2	13	1
2424	35.5	301	N	59	W	0	.3	144	S	36	E	100	315	8.8	9.2	11	1
2436	35.0	238	S	58	W	16	.3	139	S	41	E	94	315	8.7	9.2	8	1
2440	18.4	307	N	53	W	0	.4	138	S	42	E	93	315	8.7	9.2	30	4
2444	18.3	354	N	6	W	41	.4	134	S	46	E	90	315	8.6	9.2	20	2
2448	49.6	169	S	11	E	0	.3	130	S	50	E	86	315	8.6	9.1	7	3
2452	22.4	89	N	89	E	10	.4	126	S	54	E	81	315	8.7	9.1	23	2

2456	38.2	101	S	79	E	0	.4	124	S	56	E	76	312	8.8	9.1	18	1
2464	5.1	22	N	22	E	15	.4	127	S	53	E	69	301	9.0	9.5	18	1
2468	13.5	3	N	3	E	26	.4	129	S	51	E	66	296	8.9	9.3	28	2
2472	23.1	228	S	48	W	67	.3	132	S	48	E	64	292	8.7	9.1	8	3
2476	36.2	218	S	38	W	100	.3	134	S	46	E	63	288	8.6	9.1	11	3
2480	22.1	329	N	31	W	0	.3	134	S	46	E	62	287	8.6	9.1	20	3
2484	26.1	319	N	41	W	10	.4	133	S	47	E	61	287	8.7	9.1	12	3
2488	33.5	34	N	34	E	0	.4	131	S	49	E	58	287	8.7	9.1	17	1
2496	18.6	47	N	47	E	26	.4	122	S	58	E	54	291	8.6	9.1	6	1
2500	14.0	133	S	47	E	100	.3	117	S	63	E	51	294	8.6	9.2	37	1
2504	5.7	302	N	58	W	13	.3	114	S	66	E	49	294	8.7	9.1	50	2
2512	6.9	16	N	16	E	20	.3	123	S	57	E	45	282	8.8	9.1	17	4
2528	26.0	70	N	70	E	0	.3	131	S	49	E	32	260	8.7	9.1	21	2
2536	36.2	26	N	26	E	34	.3	110	S	70	E	22	272	8.8	9.1	3	3
2552	27.9	25	N	25	E	0	.3	113	S	67	E	3	249	8.8	9.1	10	1
2560	4.9	319	N	41	W	14	.4	124	S	56	E	358	233	8.7	9.1	22	4
2564	39.4	132	S	48	E	100	.4	121	S	59	E	355	233	8.7	9.1	20	2
2568	34.3	29	N	29	E	10	.3	107	S	73	E	352	244	8.7	9.1	26	2
2572	25.9	68	N	68	E	47	.3	85	N	85	E	348	263	8.7	9.1	12	3
2580	23.0	218	S	38	W	10	.2	73	N	73	E	343	270	8.7	9.1	13	3
2584	33.6	279	N	81	W	0	.2	78	N	78	E	340	261	8.7	9.1	2	2
2612	39.9	324	N	36	W	0	.3	88	N	88	E	320	231	8.8	9.2	15	1
2616	34.8	11	N	11	E	100	.3	87	N	87	E	314	226	8.8	9.1	20	4
2620	33.6	32	N	32	E	0	.2	90		EAST		310	220	8.8	9.1	12	2
2624	11.9	343	N	17	W	100	.2	90		EAST		307	216	8.8	9.1	11	2
2628	6.8	286	N	74	W	10	.2	102	S	78	E	304	201	8.7	9.1	13	2
2632	9.1	256	S	76	W	100	.2	115	S	65	E	302	187	8.7	9.1	11	1
2644	12.3	244	S	64	W	0	.3	112	S	68	E	297	184	8.7	9.1	15	4
2656	45.0	77	N	77	E	15	.0	0				292	184	8.7	9.1	12	1
2668	14.9	150	S	30	E	0	.1	107	S	73	E	292	184	8.7	9.1	8	4
2672	28.9	342	N	18	W	100	.2	107	S	73	E	292	184	8.8	9.1	12	1
2676	54.2	266	S	86	W	60	.2	107	S	73	E	292	184	8.8	9.1	12	4
2680	23.1	17	N	17	E	100	.2	108	S	72	E	292	183	8.8	9.1	14	3
2684	2.6	179	S	1	E	10	.3	109	S	71	E	291	182	8.8	9.1	12	1
2696	27.4	159	S	21	E	100	.3	94	S	86	E	291	197	8.8	9.1	13	3
2700	23.6	349	N	11	W	0	.3	100	S	80	E	291	191	8.8	9.2	13	2
2704	27.2	11	N	11	E	10	.3	107	S	73	E	291	184	8.8	9.1	18	3
2732	27.7	344	N	16	W	19	.2	114	S	66	E	296	181	8.9	9.5	17	2
2744	23.7	345	N	15	W	87	.4	147	S	33	E	301	153	10.2	10.5	12	4
2748	33.8	360		NORTH		0	.3	153	S	27	E	301	147	10.5	10.5	15	4
2752	35.0	181	S	1	W	10	.3	154	S	26	E	301	146	10.3	10.2	14	1
2760	30.6	7	N	7	E	0	.3	148	S	32	E	303	154	9.6	9.6	9	1
2768	39.3	322	N	38	W	0	.2	133	S	47	E	302	169	8.9	9.1	5	3
2772	39.5	234	S	54	W	0	.2	142	S	38	E	297	155	8.7	9.1	57	2
2776	4.9	222	S	42	W	19	.2	149	S	31	E	293	143	8.7	9.1	22	2
2780	3.1	127	S	53	E	30	.3	156	S	24	E	290	133	8.6	9.1	38	2
2784	4.6	351	N	9	W	18	.3	160	S	20	E	287	127	8.7	9.1	57	2
2796	16.7	83	N	83	E	0	.3	155	S	25	E	281	126	8.7	9.0	17	4
2804	28.2	56	N	56	E	0	.4	153	S	27	E	279	126	8.7	8.8	10	3
2808	19.4	333	N	27	W	13	.4	153	S	27	E	279	125	8.7	8.8	10	3
2812	25.6	330	N	30	W	100	.3	154	S	26	E	279	125	8.6	8.8	16	1
2820	12.5	155	S	25	E	100	.6	155	S	25	E	280	125	8.7	9.1	80	1
2824	12.9	154	S	26	E	100	.4	156	S	24	E	282	126	8.7	9.1	72	2
2828	4.3	80	N	80	E	38	.3	157	S	23	E	284	126	8.9	9.1	65	2

2844	15.8	235	S	55	W	100	.3	149	S	31	E	281	131	9.5	9.2	30	1
2864	6.3	338	N	22	W	10	.2	203	S	23	W	289	86	9.4	9.4	13	2
2868	12.9	272	N	88	W	100	.2	218	S	38	W	287	68	9.4	9.3	23	3
2876	24.5	234	S	54	W	100	.2	216	S	36	W	280	63	9.0	9.2	7	3
2880	11.8	52	N	52	E	30	.2	219	S	39	W	277	57	9.1	9.2	16	4
2888	26.3	135	S	45	E	0	.0	0				269	65	8.9	9.0	25	3
2892	15.6	327	N	33	W	12	.0	0				264	26	8.8	9.0	17	2
2896	20.1	296	N	64	W	0	.1	250	S	70	W	264	13	8.9	9.1	11	4
2900	19.2	147	S	33	E	10	.2	255	S	75	W	265	10	9.0	9.1	30	3
2904	6.3	133	S	47	E	0	.3	253	S	73	W	264	10	9.0	9.1	53	2
2908	15.0	312	N	48	W	10	.4	249	S	69	W	261	11	9.0	9.1	25	1
2912	18.6	72	N	72	E	10	.4	248	S	68	W	258	10	8.9	9.1	13	4
2916	27.2	214	S	34	W	100	.4	250	S	70	W	257	7	8.9	9.1	13	3
2920	4.8	231	S	51	W	100	.5	253	S	73	W	259	6	9.0	9.2	80	2
2924	4.1	234	S	54	W	100	.5	253	S	73	W	261	8	8.9	9.1	71	2
2928	.3	13	N	13	E	12	.4	247	S	67	W	259	12	8.9	9.1	55	2
2932	5.9	116	S	64	E	10	.4	246	S	66	W	254	7	9.0	9.1	36	2
2936	9.9	78	N	78	E	0	.5	255	S	75	W	246	351	9.0	9.1	50	3
2940	6.4	124	S	56	E	13	.5	258	S	78	W	242	343	9.0	9.1	81	2
2956	41.4	52	N	52	E	0	.6	255	S	75	W	240	344	8.8	9.1	23	1
2964	42.4	133	S	47	E	100	.6	251	S	71	W	236	345	9.0	9.1	21	4
2968	49.4	275	N	85	W	100	.7	250	S	70	W	235	345	9.1	9.1	34	2
2972	7.1	203	S	23	W	21	.7	250	S	70	W	234	343	9.2	9.1	17	2
2976	14.9	306	N	54	W	51	.7	250	S	70	W	231	340	9.3	9.1	35	1
2980	17.5	114	S	66	E	0	.7	252	S	72	W	227	335	9.2	9.0	17	3
2984	27.3	49	N	49	E	10	.7	253	S	73	W	223	330	9.0	8.8	5	2
2988	14.8	359	N	1	W	11	.7	252	S	72	W	219	327	8.8	8.8	8	3
3000	2.4	174	S	6	E	0	.9	239	S	59	W	212	332	8.6	8.8	12	1
3004	26.4	82	N	82	E	100	1.0	238	S	58	W	212	334	8.6	8.8	5	2
3020	20.7	132	S	48	E	0	.8	238	S	58	W	212	334	8.7	8.8	9	3
3024	24.2	108	S	72	E	30	.8	238	S	58	W	212	334	8.7	9.0	37	2
3028	23.8	109	S	71	E	100	.7	237	S	57	W	211	333	8.8	9.1	38	2
3036	8.6	267	S	87	W	100	.8	244	S	64	W	205	321	9.3	9.2	33	4
3040	5.1	130	S	50	E	100	.8	248	S	68	W	203	314	9.6	9.3	74	2
3044	5.6	180		SOUTH		19	.9	247	S	67	W	200	313	9.6	9.3	70	2
3048	8.3	58	N	58	E	12	1.0	247	S	67	W	198	311	9.6	9.3	28	1
3052	6.9	247	S	67	W	12	1.0	246	S	66	W	197	310	9.8	9.4	43	1
3056	8.8	227	S	47	W	51	1.0	243	S	63	W	194	310	9.4	9.3	78	1
3060	2.5	161	S	19	E	100	1.0	243	S	63	W	194	310	9.1	9.1	61	3
3064	26.1	194	S	14	W	100	1.0	244	S	64	W	197	313	9.1	9.1	24	2
3068	4.7	168	S	12	E	82	1.0	240	S	60	W	199	319	9.3	9.1	63	1
3072	1.2	187	S	7	W	100	.9	235	S	55	W	200	324	9.4	9.1	74	1
3076	1.8	163	S	17	E	100	.9	236	S	56	W	200	324	9.5	9.1	76	3
3080	3.3	127	S	53	E	33	1.0	236	S	56	W	200	323	9.7	9.1	68	3
3084	4.0	336	N	24	W	100	1.0	235	S	55	W	203	327	9.8	9.1	88	2
3088	3.4	319	N	41	W	39	.9	233	S	53	W	207	333	9.7	9.1	64	2
3092	2.2	251	S	71	W	28	1.0	232	S	52	W	210	337	9.5	8.9	64	1
3096	41.6	32	N	32	E	0	1.1	231	S	51	W	211	339	9.5	8.7	8	1
3100	47.5	322	N	38	W	0	1.2	231	S	51	W	211	340	9.6	8.7	3	2
3104	41.4	191	S	11	W	0	1.2	233	S	53	W	214	341	9.6	8.7	13	1
3120	23.7	271	N	89	W	60	1.4	236	S	56	W	227	351	9.7	8.7	9	1
3124	47.2	102	S	78	E	100	1.5	232	S	52	W	230	357	9.7	8.7	8	2
3128	37.5	309	N	51	W	18	1.7	230	S	50	W	232	1	9.6	8.7	9	4
3136	34.3	129	S	51	E	74	1.7	229	S	49	W	236	6	9.4	8.7	8	4

3140	25.3	336	N	24	W	0	1.8	228	S	48	W	237	8	9.5	8.7	6	4
3144	44.7	172	S	8	E	0	1.9	229	S	49	W	238	9	9.5	8.7	13	2
3148	25.1	124	S	56	E	0	1.9	229	S	49	W	241	11	9.4	8.7	5	1
3152	29.6	143	S	37	E	100	1.9	229	S	49	W	243	14	9.4	8.7	16	4
3156	39.2	333	N	27	W	0	2.0	229	S	49	W	244	15	9.3	8.7	8	2
3160	26.0	347	N	13	W	0	2.1	228	S	48	W	241	13	9.1	8.7	13	2
3168	12.3	358	N	2	W	27	2.0	231	S	51	W	235	3	8.7	8.7	12	4
3172	5.9	349	N	11	W	0	2.2	232	S	52	W	234	2	8.7	8.7	11	4
3172	5.9	349	N	11	W	0	2.2	232	S	52	W	234	2	8.7	8.7	11	4
3200	3.6	23	N	23	E	100	2.3	235	S	55	W	246	11	9.2	9.1	90	2
3204	2.8	32	N	32	E	100	2.3	233	S	53	W	250	17	9.5	9.4	73	2
3208	1.6	48	N	48	E	100	2.2	232	S	52	W	249	17	9.9	9.7	62	2
3212	2.5	14	N	14	E	100	2.1	233	S	53	W	248	15	9.9	9.5	49	3
3216	3.2	343	N	17	W	100	2.1	233	S	53	W	251	17	9.5	9.2	71	2
3220	3.4	339	N	21	W	100	2.2	232	S	52	W	255	22	9.2	9.0	62	2
3232	24.9	173	S	7	E	20	2.6	231	S	51	W	243	12	8.7	8.8	12	3
3236	15.7	77	N	77	E	18	2.6	233	S	53	W	240	7	8.8	8.8	15	3
3240	16.1	79	N	79	E	100	2.6	234	S	54	W	240	5	8.9	8.7	15	3
3252	24.4	255	S	75	W	0	2.7	235	S	55	W	245	9	8.9	8.7	9	3
3256	26.3	51	N	51	E	100	2.6	234	S	54	W	246	11	8.8	8.8	7	1
3268	13.8	100	S	80	E	100	2.6	234	S	54	W	252	18	8.8	9.1	71	1
3272	14.7	188	S	8	W	98	2.7	235	S	55	W	253	17	8.8	9.1	64	2
3276	8.4	270	WEST			100	2.7	236	S	56	W	254	18	8.7	8.9	47	2
3280	32.5	46	N	46	E	0	2.8	236	S	56	W	256	19	8.6	8.8	9	2
3288	24.3	295	N	65	W	10	3.0	237	S	57	W	261	24	8.6	9.1	11	4
3292	26.9	279	N	81	W	0	2.9	236	S	56	W	263	27	8.7	9.1	37	1
3296	38.2	198	S	18	W	0	3.1	236	S	56	W	265	29	8.7	9.1	13	2
3300	3.8	191	S	11	W	100	3.1	237	S	57	W	268	30	8.8	9.2	63	4
3304	1.9	100	S	80	E	100	3.1	238	S	58	W	271	32	8.8	9.4	74	1
3308	1.2	86	N	86	E	100	3.1	238	S	58	W	273	35	8.7	9.4	72	1
3312	7.1	335	N	25	W	100	2.7	238	S	58	W	273	35	8.7	9.4	66	4
3316	1.7	130	S	50	E	29	2.5	239	S	59	W	273	34	8.7	9.4	65	2
3320	3.6	264	S	84	W	85	2.5	239	S	59	W	275	35	8.8	9.6	73	2
3324	4.1	264	S	84	W	85	2.5	238	S	58	W	276	38	9.1	9.7	64	1
3328	4.7	250	S	70	W	22	2.7	236	S	56	W	271	35	9.3	9.8	69	4
3332	4.5	261	S	81	W	100	2.9	235	S	55	W	258	23	9.5	9.7	44	1
3336	3.2	273	N	87	W	96	2.9	237	S	57	W	248	11	9.5	9.4	55	4
3340	3.4	263	S	83	W	100	2.7	237	S	57	W	242	4	9.3	9.3	72	4
3344	3.5	237	S	57	W	100	2.7	238	S	58	W	238	0	9.0	9.2	64	1
3348	3.2	257	S	77	W	100	2.6	241	S	61	W	235	353	8.7	9.1	85	1
3360	18.3	323	N	37	W	100	2.6	245	S	65	W	229	343	8.7	9.0	9	3
3372	19.1	180	SOUTH			0	2.8	246	S	66	W	227	341	8.7	8.8	17	4
3380	25.6	27	N	27	E	23	3.0	246	S	66	W	226	340	8.7	8.8	9	3
3388	22.6	200	S	20	W	0	3.1	246	S	66	W	226	339	8.7	8.8	14	2
3392	7.9	173	S	7	E	0	3.2	246	S	66	W	226	339	8.7	8.8	22	1
3396	25.4	57	N	57	E	0	3.0	247	S	67	W	226	339	8.8	8.9	4	4
3408	5.4	76	N	76	E	11	3.0	248	S	68	W	228	340	8.6	8.8	9	1
3412	11.2	243	S	63	W	20	3.1	248	S	68	W	229	341	8.7	8.8	13	3
3520	48.5	62	N	62	E	47	3.1	241	S	61	W	228	346	8.8	8.8	5	1
3528	44.1	40	N	40	E	69	3.3	238	S	58	W	222	343	8.8	8.8	7	1
3532	46.5	256	S	76	W	60	3.3	236	S	56	W	217	341	8.8	8.8	8	1

3540	24.2	249	S	69	W	0	3.7	232	S	52	W	210	338	8.7	8.8	10	4
3544	5.5	200	S	20	W	10	3.5	231	S	51	W	207	336	8.7	8.8	13	4
3548	41.2	324	N	36	W	98	3.4	230	S	50	W	205	334	8.8	9.0	18	1
3552	18.8	220	S	40	W	42	3.3	230	S	50	W	203	333	8.8	9.1	3	1
3556	15.0	102	S	78	E	15	3.5	230	S	50	W	200	329	8.8	9.1	12	2
3560	29.7	338	N	22	W	0	3.7	233	S	53	W	195	321	8.7	9.1	27	1
3564	11.4	154	S	26	E	0	3.7	234	S	54	W	192	317	8.7	9.1	12	1
3568	6.5	337	N	23	W	98	3.7	235	S	55	W	193	318	8.7	9.2	27	1
3572	7.2	1	N	1	E	100	3.7	234	S	54	W	197	322	8.8	9.2	40	2
3576	6.4	336	N	24	W	14	3.6	233	S	53	W	198	325	8.9	9.2	65	2
3580	2.3	124	S	56	E	100	3.4	231	S	51	W	199	327	9.1	9.3	64	2
3592	2.9	3	N	3	E	100	3.5	230	S	50	W	199	329	9.2	9.3	57	1
3596	3.3	35	N	35	E	22	3.5	230	S	50	W	199	328	9.2	9.4	62	1
3600	3.3	19	N	19	E	100	3.5	231	S	51	W	199	328	9.2	9.2	71	1
3604	6.0	1	N	1	E	29	3.4	231	S	51	W	200	328	9.0	9.2	75	1
3612	6.4	39	N	39	E	100	3.3	229	S	49	W	202	332	9.0	9.3	80	1
3616	6.2	17	N	17	E	100	3.4	229	S	49	W	203	333	9.2	9.4	69	1
3620	5.9	353	N	7	W	100	3.4	229	S	49	W	204	334	9.5	9.6	63	1
3624	5.0	4	N	4	E	100	3.3	229	S	49	W	203	333	9.4	9.7	62	1
3628	4.1	28	N	28	E	100	3.3	229	S	49	W	198	328	9.1	9.4	72	2
3632	8.1	42	N	42	E	100	3.3	230	S	50	W	192	321	9.0	9.2	80	1
3636	9.8	35	N	35	E	69	3.3	230	S	50	W	187	317	9.3	9.3	65	1
3640	14.3	46	N	46	E	44	3.2	228	S	48	W	188	320	9.3	9.4	54	2
3644	28.6	58	N	58	E	26	3.2	227	S	47	W	196	328	9.3	9.4	46	3
3648	45.7	64	N	64	E	0	3.2	228	S	48	W	202	334	9.5	9.6	22	3
3652	28.8	252	S	72	W	0	3.3	228	S	48	W	204	335	9.4	9.6	23	3

3692	18.5	23	N	23	E	0	3.4	222	S	42	W	228	5	8.7	8.7	9	4
3696	24.4	39	N	39	E	20	3.4	222	S	42	W	227	4	8.7	8.7	16	3
3700	28.9	147	S	33	E	14	3.5	222	S	42	W	225	3	8.8	8.7	7	3
3704	28.2	208	S	28	W	0	3.5	220	S	40	W	223	2	8.7	8.7	11	3
3708	59.9	23	N	23	E	13	3.5	219	S	39	W	220	0	8.7	8.7	8	4
3712	23.7	32	N	32	E	65	3.5	221	S	41	W	218	356	8.8	8.8	10	4
3716	61.5	357	N	3	W	0	3.5	223	S	43	W	214	351	8.8	8.8	11	1
3720	11.4	190	S	10	W	100	3.5	223	S	43	W	211	347	8.8	8.8	10	2
3736	36.3	359	N	1	W	100	3.6	224	S	44	W	202	337	8.7	8.7	12	1
3740	35.8	358	N	2	W	14	3.6	225	S	45	W	202	337	8.9	8.7	12	1
3744	24.1	245	S	65	W	11	3.7	224	S	44	W	202	337	9.2	8.7	13	2
3756	2.2	32	N	32	E	100	3.5	224	S	44	W	202	337	9.6	8.8	38	1
3760	8.0	265	S	85	W	100	3.5	226	S	46	W	201	334	9.7	8.8	34	2
3772	4.5	309	N	51	W	48	2.9	228	S	48	W	204	336	9.1	8.9	35	4
3776	6.0	29	N	29	E	100	3.1	230	S	50	W	196	326	8.8	9.0	77	3
3780	5.4	56	N	56	E	10	3.1	228	S	48	W	183	315	8.7	9.1	65	3
3784	5.9	37	N	37	E	100	3.2	225	S	45	W	174	309	8.7	9.2	33	2
3788	10.8	225	S	45	W	10	3.3	223	S	43	W	172	308	8.8	9.2	29	1
3792	6.3	7	N	7	E	14	3.2	222	S	42	W	172	310	8.8	9.2	74	1
3796	4.8	25	N	25	E	100	3.2	223	S	43	W	174	311	8.7	9.5	73	2
3800	5.7	66	N	66	E	19	3.2	227	S	47	W	180	312	8.8	9.6	82	2
3820	29.4	273	N	87	W	0	3.0	230	S	50	W	209	338	8.7	9.5	3	4
3824	40.0	73	N	73	E	100	3.0	231	S	51	W	212	340	8.6	9.6	12	2
3828	38.2	79	N	79	E	100	3.1	233	S	53	W	218	344	8.7	9.4	0	1
3832	27.2	105	S	75	E	0	3.2	231	S	51	W	225	353	8.8	9.2	0	4

3836	2.4	201	S	21	W	100	3.2	228	S	48	W	225	356	8.8	9.2	5	1
3840	4.9	165	S	15	E	11	3.1	229	S	49	W	223	354	8.8	9.4	2	1
3844	18.4	7	N	7	E	10	3.1	230	S	50	W	224	353	8.8	9.5	11	4
3852	44.9	268	S	88	W	0	3.1	230	S	50	W	229	359	8.8	9.6	11	1
3860	46.9	327	N	33	W	64	3.3	235	S	55	W	224	349	8.8	9.7	12	2
3864	46.0	38	N	38	E	43	3.5	237	S	57	W	213	336	9.0	9.8	13	3
3868	31.3	309	N	51	W	0	3.7	238	S	58	W	208	330	9.1	9.9	13	3
3872	28.4	238	S	58	W	13	3.7	243	S	63	W	206	322	9.3	9.8	4	4
3876	51.6	31	N	31	E	10	3.7	247	S	67	W	207	320	9.5	9.8	12	2
3880	34.9	189	S	9	W	0	3.6	247	S	67	W	209	322	9.6	10.0	4	1
3888	19.5	66	N	66	E	0	3.4	252	S	72	W	223	331	9.2	10.1	15	3
3892	20.5	289	N	71	W	0	3.2	254	S	74	W	228	333	9.1	10.1	10	4
3896	26.7	65	N	65	E	63	3.2	256	S	76	W	230	334	9.1	10.1	9	4
3900	8.7	95	S	85	E	0	3.1	259	S	79	W	235	336	9.1	10.2	5	2
3904	2.2	62	N	62	E	13	3.0	260	S	80	W	242	342	9.0	10.5	41	2
3908	2.1	155	S	25	E	13	3.0	259	S	79	W	245	346	8.9	10.1	43	2
3912	29.4	104	S	76	E	0	3.1	257	S	77	W	243	346	8.7	9.6	58	4
3916	19.3	24	N	24	E	10	3.1	256	S	76	W	237	341	8.7	9.4	35	1
3920	2.2	62	N	62	E	100	3.1	257	S	77	W	230	333	8.7	9.4	78	1
3924	2.7	64	N	64	E	100	3.1	257	S	77	W	222	325	8.7	9.4	75	1
3928	15.0	27	N	27	E	71	3.2	257	S	77	W	211	314	8.7	9.5	29	1
3932	39.6	288	N	72	W	100	3.5	257	S	77	W	203	306	8.8	9.4	12	4
3940	37.8	250	S	70	W	66	3.3	258	S	78	W	199	301	8.8	9.1	14	1
3944	44.6	64	N	64	E	100	3.3	259	S	79	W	198	299	8.8	9.1	20	4
3952	22.2	55	N	55	E	0	3.3	262	S	82	W	198	296	8.7	9.4	0	2
3964	9.9	45	N	45	E	0	3.5	264	S	84	W	191	286	8.8	9.6	0	4
3968	3.9	107	S	73	E	0	3.5	264	S	84	W	186	281	8.8	9.6	32	2
3972	2.8	85	N	85	E	0	3.3	264	S	84	W	183	278	8.8	9.7	41	2
3976	10.5	218	S	38	W	45	3.3	263	S	83	W	182	278	8.8	9.8	28	1
3980	11.9	32	N	32	E	13	3.5	264	S	84	W	184	279	8.8	9.8	32	2
3984	3.5	186	S	6	W	100	3.6	264	S	84	W	184	280	8.8	9.8	72	3
3988	2.8	69	N	69	E	100	3.7	264	S	84	W	182	277	8.8	9.8	67	4
3992	3.6	13	N	13	E	100	3.7	264	S	84	W	179	274	8.8	9.9	28	1
3996	3.2	81	N	81	E	14	3.8	264	S	84	W	179	274	8.8	10.0	38	2
4000	29.2	227	S	47	W	63	4.0	265	S	85	W	181	276	8.8	9.9	12	2
4004	.4	51	N	51	E	100	3.9	268	S	88	W	189	281	8.8	9.8	77	3
4008	.3	158	S	22	E	60	3.9	271	N	89	W	196	285	8.8	9.8	78	1
4012	25.1	243	S	63	W	13	3.9	271	N	89	W	197	285	8.8	9.9	10	4
4016	16.7	80	N	80	E	100	4.0	272	N	88	W	197	285	8.8	10.0	33	2
4020	5.6	153	S	27	E	0	4.2	272	N	88	W	197	285	8.7	9.9	23	1
4064	4.9	93	S	87	E	0	5.0	275	N	85	W	194	278	8.4	9.7	6	1
4068	38.6	252	S	72	W	100	5.0	277	N	83	W	196	279	8.4	9.7	11	4
4072	21.4	146	S	34	E	10	5.0	278	N	82	W	197	279	8.4	9.7	10	4
4076	24.4	146	S	34	E	0	5.1	277	N	83	W	198	280	8.4	9.7	7	1
4080	37.0	113	S	67	E	0	5.3	277	N	83	W	199	281	8.4	9.8	6	2
4088	15.3	143	S	37	E	10	5.5	276	N	84	W	202	285	8.5	9.8	12	4
4092	27.1	45	N	45	E	10	5.5	276	N	84	W	205	288	8.6	9.9	27	2
4100	23.2	176	S	4	E	100	5.4	277	N	83	W	206	289	8.7	9.5	39	2
4104	12.6	214	S	34	W	0	5.4	279	N	81	W	203	284	8.8	9.5	16	3
4108	32.5	357	N	3	W	41	5.4	279	N	81	W	199	280	9.0	9.6	2	1
4112	23.6	123	S	57	E	0	5.5	278	N	82	W	197	278	9.0	9.5	9	4

4116	37.0	294	N	66	W	0	5.5	275	N	85	W	190	274	8.9	9.2	10	2
4120	35.1	148	S	32	E	0	5.4	273	N	87	W	180	267	8.7	9.1	3	1
4128	34.7	221	S	41	W	0	5.3	278	N	82	W	173	255	8.7	9.1	12	4
4136	39.5	160	S	20	E	100	5.5	281	N	79	W	162	241	8.7	9.4	24	3
4140	13.5	335	N	25	W	40	5.4	283	N	77	W	153	229	8.8	9.2	45	1
4144	15.7	299	N	61	W	100	5.2	289	N	71	W	147	218	8.7	9.1	49	1
4148	41.6	324	N	36	W	63	5.0	290	N	70	W	147	216	8.7	9.1	21	1
4152	19.4	176	S	4	E	93	4.9	290	N	70	W	146	215	8.8	9.0	1	1
4156	10.0	272	N	88	W	100	5.1	290	N	70	W	144	214	8.8	9.1	15	2
4160	1.6	83	N	83	E	100	5.0	288	N	72	W	140	212	8.8	9.3	41	2
4164	2.6	122	S	58	E	100	4.9	285	N	75	W	133	207	8.7	9.4	48	2
4168	14.6	254	S	74	W	10	4.9	286	N	74	W	128	201	8.8	9.4	6	2
4172	25.5	110	S	70	E	100	4.7	288	N	72	W	126	197	8.9	9.4	18	1
4176	3.0	305	N	55	W	30	4.8	289	N	71	W	127	198	9.1	9.4	14	1
4180	2.3	287	N	73	W	49	4.8	289	N	71	W	126	196	9.1	9.4	41	2
4184	9.5	276	N	84	W	21	4.6	292	N	68	W	123	191	9.0	9.6	5	3
4188	31.0	163	S	17	E	0	4.5	294	N	66	W	120	185	9.0	9.7	13	2
4192	26.6	147	S	33	E	87	4.4	294	N	66	W	116	181	8.9	9.6	17	3
4200	37.0	274	N	86	W	65	4.5	290	N	70	W	108	177	8.8	9.4	19	1
4204	34.1	277	N	83	W	100	4.5	291	N	69	W	107	175	8.9	9.3	4	1
4208	37.8	173	S	7	E	0	4.6	292	N	68	W	107	174	9.0	9.2	21	4
4212	52.0	90	EAST			23	4.5	294	N	66	W	106	172	9.0	9.2	16	1
4216	24.3	207	S	27	W	19	4.5	296	N	64	W	105	169	8.8	9.1	17	2
4220	13.3	228	S	48	W	100	4.2	298	N	62	W	104	166	8.6	9.1	19	1
4224	30.3	139	S	41	E	68	4.1	300	N	60	W	103	162	8.6	9.0	22	1
4228	5.2	185	S	5	W	11	4.3	299	N	61	W	100	160	8.6	8.8	13	4
4232	18.5	274	N	86	W	0	4.2	298	N	62	W	96	158	8.7	8.8	11	2
4240	2.9	55	N	55	E	100	4.3	300	N	60	W	83	143	8.7	9.0	54	2
4244	3.1	63	N	63	E	100	4.2	301	N	59	W	79	137	8.7	9.0	33	1
4248	31.5	272	N	88	W	18	4.1	301	N	59	W	76	135	8.8	8.9	15	1
4256	56.4	76	N	76	E	0	4.1	298	N	62	W	69	131	8.8	8.8	23	4
4260	29.2	324	N	36	W	0	4.1	296	N	64	W	65	129	8.8	8.9	17	1
4264	25.8	64	N	64	E	10	3.9	295	N	65	W	61	126	8.8	8.9	16	2
4268	48.9	215	S	35	W	100	3.9	295	N	65	W	55	119	8.8	8.8	15	1
4272	1.8	100	S	80	E	0	4.0	298	N	62	W	49	111	8.7	8.8	30	2
4276	.8	14	N	14	E	11	4.1	300	N	60	W	47	106	8.7	8.8	28	2
4280	29.7	171	S	9	E	0	3.8	301	N	59	W	46	105	8.7	8.8	21	1
4284	4.5	159	S	21	E	25	3.6	302	N	58	W	45	103	8.7	8.8	14	4
4288	24.0	314	N	46	W	100	3.6	302	N	58	W	44	102	8.8	8.8	23	4
4292	27.1	9	N	9	E	0	3.5	301	N	59	W	43	101	8.8	8.9	14	4
4296	28.7	65	N	65	E	0	3.6	300	N	60	W	41	101	8.8	8.9	20	2
4304	12.7	239	S	59	W	44	3.6	298	N	62	W	36	97	8.7	8.8	25	1
4308	24.7	359	N	1	W	0	3.7	296	N	64	W	32	95	8.6	8.9	18	2
4312	34.4	168	S	12	E	0	3.8	295	N	65	W	27	91	8.7	9.1	29	1
4316	16.2	327	N	33	W	13	3.8	297	N	63	W	22	85	8.6	9.0	1	4
4320	27.4	322	N	38	W	0	3.7	299	N	61	W	18	79	8.7	8.9	6	3
4324	6.2	213	S	33	W	32	3.5	300	N	60	W	15	75	8.8	9.1	1	3
4328	15.9	224	S	44	W	47	3.3	298	N	62	W	11	73	8.7	9.0	12	3
4344	43.5	119	S	61	E	74	3.3	295	N	65	W	5	70	8.7	8.9	26	2
4356	48.4	49	N	49	E	0	3.1	300	N	60	W	0	59	8.8	8.9	23	1
4360	15.5	77	N	77	E	74	3.1	300	N	60	W	359	58	8.7	8.8	25	4
4364	2.2	351	N	9	W	100	3.2	300	N	60	W	356	56	8.6	8.8	8	4
4368	44.3	239	S	59	W	0	3.4	301	N	59	W	354	52	8.7	8.8	36	4
4372	23.7	287	N	73	W	0	3.2	301	N	59	W	351	49	8.8	8.8	13	4

4376	19.1	114	S	66	E	54	2.9	299	N	61	W	348	48	8.8	8.9	20	1
4380	7.2	222	S	42	W	10	3.0	299	N	61	W	345	45	8.7	8.8	66	1
4396	16.8	135	S	45	E	0	2.9	298	N	62	W	337	38	8.7	8.8	17	4
4404	49.9	136	S	44	E	25	3.1	302	N	58	W	334	32	8.7	8.9	20	4
4408	6.1	130	S	50	E	0	3.1	303	N	57	W	333	30	8.7	8.9	23	4
4412	21.5	282	N	78	W	0	3.0	302	N	58	W	332	29	8.8	8.8	14	4
4416	.9	16	N	16	E	12	2.9	301	N	59	W	330	29	8.8	8.8	15	1
4420	15.3	193	S	13	W	27	2.7	300	N	60	W	329	29	8.8	8.8	50	2
4424	5.7	348	N	12	W	100	2.6	299	N	61	W	328	29	8.7	8.9	40	2
4428	8.6	311	N	49	W	65	2.5	299	N	61	W	328	29	8.7	8.9	57	4
4432	14.0	311	N	49	W	100	2.6	300	N	60	W	327	27	8.7	8.8	18	2
4444	2.1	158	S	22	E	100	2.7	307	N	53	W	319	12	8.8	9.0	37	2
4452	16.2	224	S	44	W	34	2.6	304	N	56	W	310	6	8.7	9.1	17	4
4456	2.4	53	N	53	E	0	2.7	302	N	58	W	306	4	8.8	9.6	74	4
4460	1.9	63	N	63	E	10	2.9	303	N	57	W	301	358	9.3	11.1	47	4
4464	28.6	279	N	81	W	17	2.8	306	N	54	W	299	352	9.2	10.7	30	1
4468	45.3	214	S	34	W	26	2.5	307	N	53	W	297	350	8.6	9.1	17	4
4476	7.3	167	S	13	E	43	2.4	309	N	51	W	295	346	8.7	9.1	15	4
4480	11.7	246	S	66	W	10	2.5	309	N	51	W	294	345	8.7	9.0	34	2
4484	6.0	232	S	52	W	51	2.7	309	N	51	W	291	341	8.8	8.9	38	3
4488	12.6	279	N	81	W	0	2.5	309	N	51	W	289	339	8.8	9.0	52	1
4500	30.0	60	N	60	E	21	2.6	304	N	56	W	275	330	8.8	8.9	27	4
4504	3.1	150	S	30	E	0	2.5	303	N	57	W	268	325	8.8	8.9	49	4
4508	3.4	176	S	4	E	10	2.5	305	N	55	W	264	319	8.7	9.1	24	1
4512	28.2	299	N	61	W	100	2.3	309	N	51	W	263	314	8.7	9.6	10	3
4516	7.8	271	N	89	W	15	2.4	309	N	51	W	261	312	8.8	9.7	8	4
4532	41.6	345	N	15	W	0	2.7	305	N	55	W	243	298	8.9	9.6	18	2
4560	19.4	186	S	6	W	10	2.1	306	N	54	W	232	285	8.7	9.2	13	4
4564	48.3	217	S	37	W	10	2.1	305	N	55	W	224	279	8.8	9.1	45	2
4572	19.7	344	N	16	W	62	2.3	300	N	60	W	216	276	8.7	8.8	13	2
4576	29.2	129	S	51	E	64	2.3	298	N	62	W	213	275	8.8	8.8	13	3
4580	44.8	139	S	41	E	0	2.1	297	N	63	W	209	272	8.8	8.8	17	2
4584	50.1	88	N	88	E	34	2.1	299	N	61	W	205	266	8.7	8.8	10	4
4588	19.4	209	S	29	W	61	2.2	301	N	59	W	203	261	8.7	8.8	16	3
4596	2.5	192	S	12	W	33	2.2	302	N	58	W	199	256	8.7	8.9	90	2
4600	6.7	165	S	15	E	56	2.1	306	N	54	W	196	250	8.7	8.8	84	2
4604	12.8	208	S	28	W	100	2.1	308	N	52	W	194	245	8.7	8.8	79	2
4608	22.6	188	S	8	W	29	2.1	309	N	51	W	192	243	8.7	8.8	87	3
4612	24.3	295	N	65	W	96	2.1	305	N	55	W	190	244	8.7	8.8	73	1
4620	29.4	339	N	21	W	30	2.1	297	N	63	W	184	246	8.7	8.8	7	3
4624	45.2	105	S	75	E	25	2.1	295	N	65	W	185	249	8.8	8.8	11	2
4628	25.9	87	N	87	E	100	2.1	298	N	62	W	188	250	8.7	8.9	15	3
4632	49.3	34	N	34	E	100	2.2	301	N	59	W	190	248	8.7	8.9	12	1
4636	49.5	288	N	72	W	19	2.2	303	N	57	W	189	246	8.8	8.8	9	2
4644	29.0	94	S	86	E	17	2.5	304	N	56	W	186	241	8.7	8.8	6	1
4648	19.8	122	S	58	E	17	2.2	304	N	56	W	185	241	8.8	8.8	8	4
4656	41.0	34	N	34	E	100	2.3	302	N	58	W	185	242	8.8	8.9	25	2
4668	37.6	145	S	35	E	10	2.3	302	N	58	W	191	249	8.8	9.1	19	4
4680	23.9	277	N	83	W	19	2.3	305	N	55	W	182	236	8.8	8.8	8	2
4684	23.8	277	N	83	W	37	2.1	305	N	55	W	181	236	8.8	8.8	6	1
4688	25.3	172	S	8	E	10	2.1	302	N	58	W	180	237	8.7	8.7	2	2
4692	31.4	187	S	7	W	53	2.1	298	N	62	W	177	238	8.6	8.7	17	1
4696	15.5	65	N	65	E	0	2.0	295	N	65	W	173	238	8.6	8.7	9	2
4700	29.5	161	S	19	E	0	2.0	292	N	68	W	171	238	8.7	8.8	5	3

4704	10.8	140	S	40	E	62	2.0	288	N	72	W	166	237	8.6	8.7	25	1
4708	11.3	134	S	46	E	55	2.2	290	N	70	W	160	230	8.6	8.7	16	1
4712	32.3	209	S	29	W	14	2.3	291	N	69	W	155	223	8.7	9.0	9	4
4716	21.5	351	N	9	W	18	2.4	291	N	69	W	149	217	8.8	9.0	4	3
4720	13.4	219	S	39	W	100	2.4	295	N	65	W	145	210	8.8	8.8	10	1
4728	19.0	128	S	52	E	10	2.0	298	N	62	W	142	204	8.8	8.8	9	4
4732	.7	9	N	9	E	0	2.1	300	N	60	W	138	197	8.8	8.8	28	1
4736	2.0	274	N	86	W	0	2.1	302	N	58	W	133	191	8.8	8.8	16	2
4740	37.7	84	N	84	E	100	2.1	300	N	60	W	129	188	8.8	8.8	6	2
4744	19.3	279	N	81	W	100	2.1	299	N	61	W	125	186	8.8	8.8	27	1
4748	19.3	276	N	84	W	100	2.0	299	N	61	W	123	183	8.8	8.8	26	1
4752	31.2	98	S	82	E	0	2.1	298	N	62	W	120	181	8.8	8.8	8	1
4764	27.0	221	S	41	W	0	2.1	295	N	65	W	111	176	8.8	8.8	18	3
4784	9.7	288	N	72	W	28	1.6	299	N	61	W	94	154	8.7	8.8	24	1
4788	6.7	231	S	51	W	100	1.6	301	N	59	W	93	152	8.7	8.7	47	2
4792	21.4	161	S	19	E	25	1.6	303	N	57	W	92	149	8.7	8.7	19	2
4796	23.1	156	S	24	E	0	1.8	304	N	56	W	88	143	8.6	8.7	21	2
4800	24.6	129	S	51	E	13	1.9	305	N	55	W	83	137	8.6	8.7	7	1
4804	32.7	340	N	20	W	100	1.9	305	N	55	W	78	132	8.6	8.7	12	2
4808	28.1	313	N	47	W	14	2.0	306	N	54	W	77	130	8.6	8.7	20	2
4812	3.6	315	N	45	W	33	2.1	307	N	53	W	80	133	8.6	8.7	45	4
4816	3.4	268	S	88	W	71	2.0	307	N	53	W	83	135	8.6	8.8	28	3
4820	5.6	317	N	43	W	68	1.7	305	N	55	W	83	137	8.6	8.7	29	4
4824	13.8	266	S	86	W	0	1.7	302	N	58	W	83	141	8.6	8.7	18	3
4828	.3	260	S	80	W	100	1.9	300	N	60	W	83	142	8.6	8.7	43	2
4832	1.0	328	N	32	W	100	1.9	301	N	59	W	84	142	8.6	8.7	43	1
4840	19.4	1	N	1	E	13	1.8	297	N	63	W	85	148	8.5	8.7	24	1
4844	7.5	267	S	87	W	92	1.8	296	N	64	W	80	144	8.6	8.7	27	1
4848	11.1	43	N	43	E	100	1.9	298	N	62	W	74	136	8.6	8.7	9	1
4852	21.3	208	S	28	W	12	2.0	304	N	56	W	72	128	8.6	8.7	12	3
4856	4.6	318	N	42	W	100	2.0	309	N	51	W	74	125	8.7	8.7	33	3
4860	5.5	302	N	58	W	60	2.0	311	N	49	W	76	124	8.7	8.7	25	1
4864	13.5	277	N	83	W	0	2.1	311	N	49	W	76	125	8.7	8.7	10	1
4868	10.4	356	N	4	W	100	2.2	310	N	50	W	78	128	8.6	8.7	22	4
4872	11.5	292	N	68	W	35	2.2	308	N	52	W	80	131	8.7	8.7	25	2
4876	9.6	316	N	44	W	0	2.4	307	N	53	W	79	132	8.6	8.7	40	2
4880	9.4	106	S	74	E	0	2.4	307	N	53	W	78	130	8.6	8.7	24	2
4892	3.9	329	N	31	W	10	2.2	307	N	53	W	79	131	8.5	8.7	23	1
4896	7.2	307	N	53	W	69	2.1	306	N	54	W	80	133	8.5	8.7	26	2
4900	7.2	289	N	71	W	10	2.2	307	N	53	W	80	133	8.5	8.7	38	2
4904	1.5	99	S	81	E	100	2.2	308	N	52	W	80	132	8.5	8.7	26	2
4908	15.5	320	N	40	W	0	2.2	310	N	50	W	81	130	8.5	8.7	27	1
4912	7.6	129	S	51	E	0	2.1	312	N	48	W	83	131	8.6	8.7	28	4
4916	13.8	155	S	25	E	100	2.1	311	N	49	W	84	133	8.6	8.7	16	1
4920	7.3	105	S	75	E	10	2.0	310	N	50	W	84	134	8.5	8.7	26	2
4924	1.3	239	S	59	W	43	2.1	311	N	49	W	84	133	8.5	8.7	29	2
4928	1.4	60	N	60	E	16	2.1	313	N	47	W	85	132	8.5	8.7	28	2
4936	7.2	48	N	48	E	10	2.0	312	N	48	W	88	136	8.5	8.7	14	1
4940	5.6	356	N	4	W	37	1.9	314	N	46	W	90	136	8.5	8.7	34	2
4944	4.3	125	S	55	E	32	1.9	313	N	47	W	91	137	8.5	8.7	29	1
4948	3.5	87	N	87	E	11	2.0	310	N	50	W	90	139	8.5	8.7	37	1
4956	1.8	169	S	11	E	100	2.2	312	N	48	W	89	137	8.5	8.7	25	2
4960	6.2	341	N	19	W	100	2.2	313	N	47	W	89	136	8.5	8.7	45	3
4964	.3	21	N	21	E	100	2.1	316	N	44	W	88	132	8.5	8.7	51	1

4968	3.9	112	S	68	E	21	1.9	317	N	43	W	87	129	8.5	8.7	36	3
4972	2.2	64	N	64	E	100	1.8	319	N	41	W	85	125	8.4	8.8	27	4
4976	2.7	265	S	85	W	10	1.7	318	N	42	W	83	125	8.4	8.7	25	2
4980	2.8	188	S	8	W	13	1.9	317	N	43	W	79	122	8.5	8.7	24	1
4984	4.8	182	S	2	W	10	2.0	318	N	42	W	75	117	8.5	8.7	21	4
4988	4.7	225	S	45	W	46	2.1	319	N	41	W	73	114	8.5	8.7	23	3
4996	15.0	191	S	11	W	10	2.1	321	N	39	W	71	110	8.5	8.7	22	3
5000	2.0	126	S	54	E	13	1.9	323	N	37	W	73	109	8.4	8.7	53	1
5004	2.1	111	S	69	E	19	1.7	323	N	37	W	71	108	8.4	8.7	46	1
5008	4.6	41	N	41	E	0	1.7	324	N	36	W	70	105	8.5	8.7	38	1
5012	18.0	193	S	13	W	0	1.9	326	N	34	W	69	103	8.5	8.7	37	4
5016	9.3	38	N	38	E	72	1.9	324	N	36	W	70	106	8.6	8.7	40	1
5020	3.8	216	S	36	W	100	1.9	323	N	37	W	70	106	8.6	8.7	43	2
5024	2.9	245	S	65	W	100	2.0	324	N	36	W	68	104	8.5	8.7	19	2
5028	6.4	307	N	53	W	100	1.8	324	N	36	W	67	102	8.5	8.7	19	2
5032	32.1	180		SOUTH		0	1.7	322	N	38	W	66	103	8.5	8.7	6	2
5036	24.1	309	N	51	W	100	1.6	328	N	32	W	63	95	8.4	8.8	2	2
5040	38.9	216	S	36	W	100	1.6	343	N	17	W	57	73	8.4	9.2	56	3
5056	31.5	355	N	5	W	10	2.6	349	N	11	W	47	57	8.5	8.7	17	1
5060	22.1	1	N	1	E	0	2.3	341	N	19	W	48	66	8.5	8.7	4	1

REPEAT SECTION

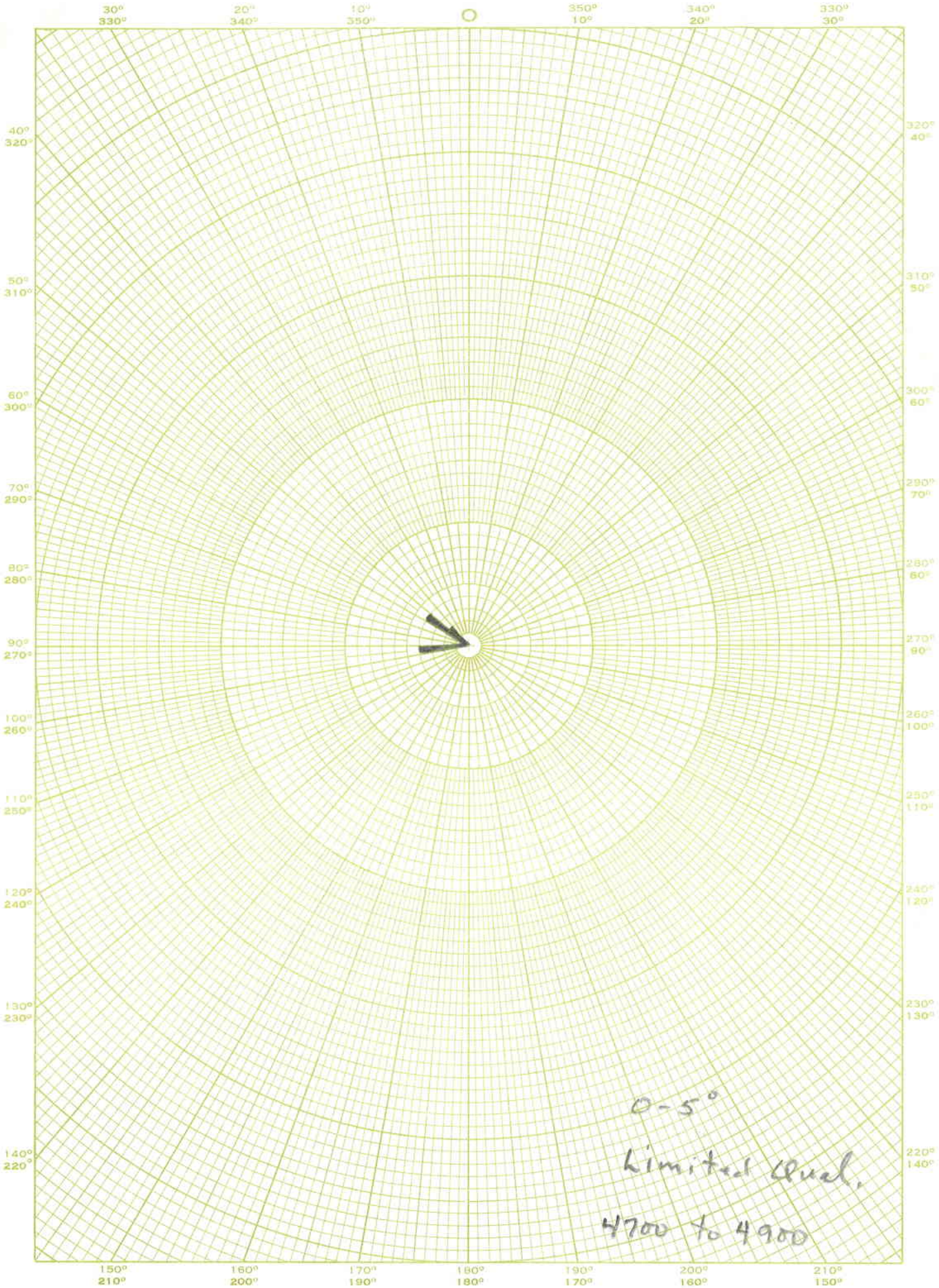
3428	44.5	306	N	54	W	0	3.0	249	S	69	W	234	344	9.1	8.9	11	4
3436	35.5	331	N	29	W	0	3.2	248	S	68	W	243	355	9.1	9.1	20	3
3444	4.4	326	N	34	W	100	2.9	249	S	69	W	262	13	8.9	9.1	21	1
3448	2.5	226	S	46	W	13	2.8	247	S	67	W	269	22	8.8	9.1	50	3
3452	3.3	322	N	38	W	100	2.7	248	S	68	W	277	28	8.9	9.2	64	3
3456	2.2	43	N	43	E	0	2.6	248	S	68	W	280	31	9.2	9.3	53	1
3460	8.0	244	S	64	W	98	2.7	248	S	68	W	282	33	9.4	9.5	8	1
3464	2.8	27	N	27	E	100	2.8	250	S	70	W	287	36	9.4	9.3	55	4
3468	2.3	331	N	29	W	100	2.7	248	S	68	W	291	42	9.2	9.2	52	1
3472	4.7	323	N	37	W	71	2.6	247	S	67	W	294	47	8.9	9.3	67	1
3476	12.9	19	N	19	E	100	2.7	247	S	67	W	302	55	8.7	9.4	70	1
3480	25.8	24	N	24	E	85	2.7	248	S	68	W	315	67	8.8	9.3	28	1
3484	10.3	286	N	74	W	0	2.5	248	S	68	W	325	77	8.8	9.1	17	1
3488	11.7	21	N	21	E	71	2.5	244	S	64	W	332	87	8.8	9.1	41	4
3492	3.6	47	N	47	E	10	2.6	243	S	63	W	336	92	9.0	9.1	34	1
3500	4.1	256	S	76	W	100	2.4	242	S	62	W	341	98	9.1	9.1	51	1
3504	3.7	260	S	80	W	100	2.5	244	S	64	W	343	99	9.2	9.0	54	1
3520	33.1	353	N	7	W	0	2.7	240	S	60	W	347	107	8.9	8.8	9	3
3532	14.9	324	N	36	W	0	3.0	240	S	60	W	355	115	8.7	8.8	17	1
3536	5.0	280	N	80	W	0	3.0	237	S	57	W	360	122	8.7	8.8	9	3
3540	28.5	39	N	39	E	0	3.1	236	S	56	W	2	125	8.8	8.8	11	3
3544	32.7	115	S	65	E	14	2.9	235	S	55	W	2	127	8.7	8.9	13	2
3552	21.8	64	N	64	E	14	3.3	234	S	54	W	2	128	8.8	9.1	10	4
3556	9.1	128	S	52	E	0	3.3	233	S	53	W	2	128	8.8	9.1	6	2
3568	9.0	330	N	30	W	100	3.4	234	S	54	W	1	127	8.7	9.3	57	1
3572	7.1	343	N	17	W	100	3.3	234	S	54	W	2	128	8.7	9.3	73	1
3576	3.7	338	N	22	W	18	3.2	235	S	55	W	3	128	8.8	9.2	71	4
3580	1.9	28	N	28	E	24	3.1	236	S	56	W	6	130	9.1	9.4	70	4
3584	4.8	360		NORTH		100	3.2	237	S	57	W	13	135	9.3	9.6	63	4

3588	4.0	329	N	31	W	0	3.2	236	S	56	W	16	139	9.3	9.5	28	3
3592	5.1	10	N	10	E	100	3.2	236	S	56	W	16	140	9.2	9.3	44	3
3596	5.0	51	N	51	E	100	3.2	237	S	57	W	16	139	9.2	9.4	72	4

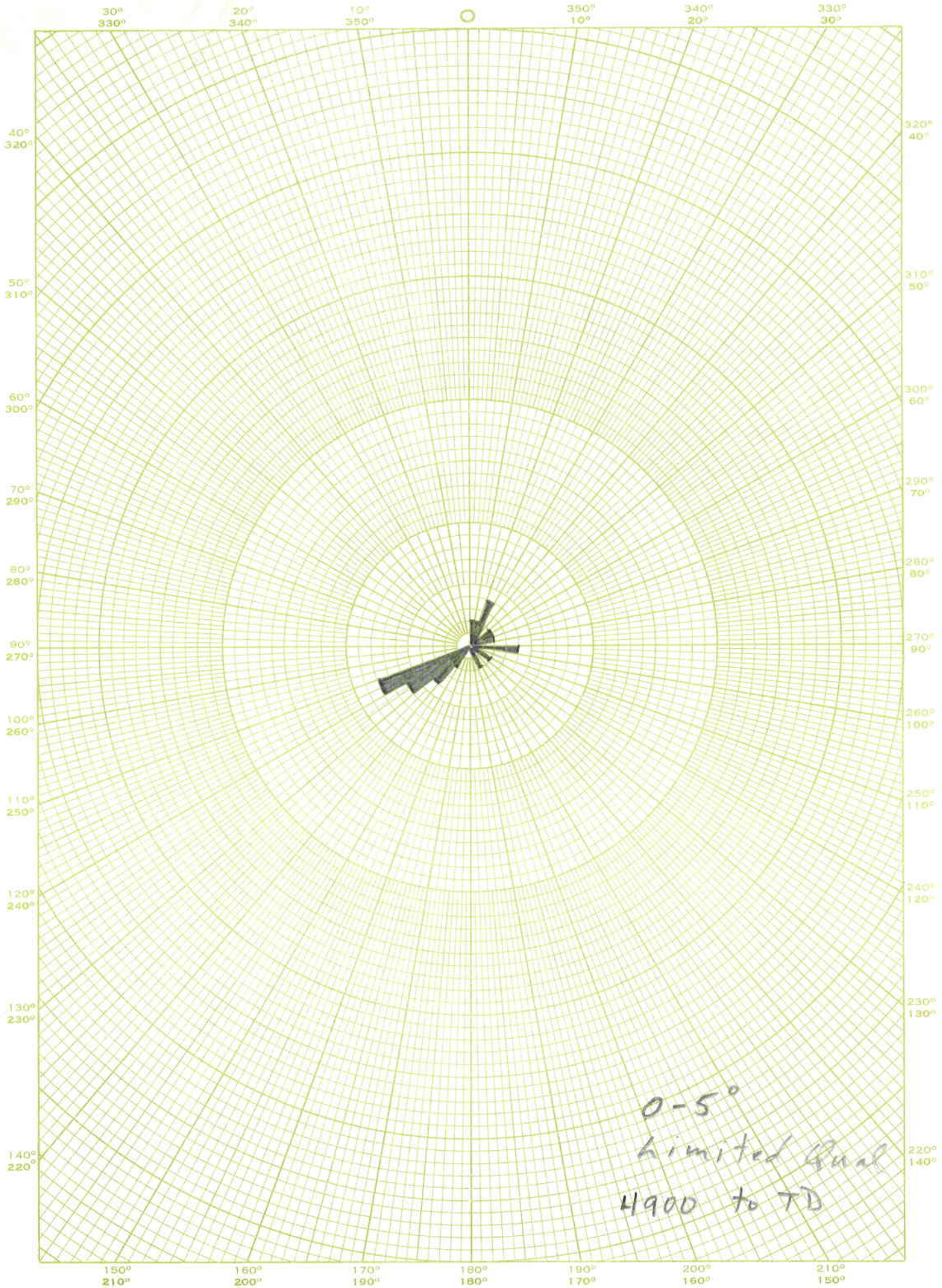
REPEAT SECTION

4816	6.7	164	S	16	E	100	1.5	301	N	59	W	89	148	4.5	.4	79	1
4820	7.5	111	S	69	E	15	1.5	300	N	60	W	88	147	4.7	2.8	34	1
4824	6.6	351	N	9	W	65	1.7	299	N	61	W	87	148	5.7	5.7	9	1
4828	2.4	329	N	31	W	11	1.9	296	N	64	W	86	149	7.3	7.3	54	4
4832	2.2	325	N	35	W	11	1.9	298	N	62	W	84	146	8.4	8.4	65	4
4836	22.4	314	N	46	W	100	2.0	299	N	61	W	86	146	8.5	8.8	12	1
4840	3.1	126	S	54	E	0	2.1	296	N	64	W	85	148	8.4	8.8	20	1
4844	11.9	51	N	51	E	0	2.2	295	N	65	W	80	145	8.5	8.7	17	1
4848	8.5	94	S	86	E	10	2.2	298	N	62	W	78	139	8.5	8.7	11	2
4852	9.2	204	S	24	W	28	2.1	305	N	55	W	75	130	8.5	8.8	39	2
4856	8.0	208	S	28	W	41	2.0	309	N	51	W	74	124	8.5	8.7	41	2
4860	4.4	225	S	45	W	19	2.1	312	N	48	W	74	122	8.5	8.7	25	2
4864	3.3	162	S	18	E	0	2.3	313	N	47	W	73	119	8.4	8.7	21	1
4872	2.7	42	N	42	E	100	2.6	309	N	51	W	74	125	8.7	8.8	32	2
4876	2.4	41	N	41	E	13	2.7	308	N	52	W	75	126	8.7	8.8	39	2
4880	28.1	298	N	62	W	0	2.8	310	N	50	W	74	124	8.6	8.8	11	1
4884	31.1	323	N	37	W	19	2.7	310	N	50	W	74	124	8.6	8.8	4	4
4888	31.0	335	N	25	W	0	2.5	310	N	50	W	76	126	8.6	8.8	15	2
4892	5.8	273	N	87	W	100	2.5	309	N	51	W	79	130	8.5	8.8	27	1
4896	5.4	293	N	67	W	46	2.5	307	N	53	W	81	133	8.5	8.8	30	2
4900	3.8	274	N	86	W	23	2.4	309	N	51	W	80	131	8.6	8.8	35	2
4904	3.0	239	S	59	W	100	2.4	311	N	49	W	81	130	8.6	8.7	32	2
4908	12.8	222	S	42	W	22	2.5	311	N	49	W	82	130	8.6	8.8	13	3
4916	6.9	211	S	31	W	20	2.3	312	N	48	W	84	131	8.6	8.8	9	2
4920	2.9	165	S	15	E	13	2.3	311	N	49	W	84	133	8.6	8.8	21	2
4924	7.7	287	N	73	W	100	2.2	312	N	48	W	84	132	8.6	8.7	11	1
4928	6.0	289	N	71	W	0	2.1	312	N	48	W	84	132	8.6	8.7	14	1
4932	2.6	241	S	61	W	100	2.1	312	N	48	W	85	132	8.6	8.7	29	2
4936	2.1	92	S	88	E	100	2.1	313	N	47	W	84	131	8.5	8.7	27	3
4940	2.3	73	N	73	E	100	2.1	314	N	46	W	84	129	8.5	8.7	33	2
4944	3.8	130	S	50	E	11	2.2	315	N	45	W	85	130	8.5	8.7	43	1
4948	5.3	124	S	56	E	14	2.3	311	N	49	W	87	136	8.5	8.7	48	1
4952	5.6	184	S	4	W	45	2.4	312	N	48	W	88	135	8.4	8.7	21	1
4960	3.0	223	S	43	W	12	2.5	313	N	47	W	86	132	8.4	8.8	19	3
4964	2.5	19	N	19	E	20	2.4	316	N	44	W	85	129	8.4	8.8	20	3
4968	4.3	51	N	51	E	69	2.2	319	N	41	W	86	126	8.4	8.8	19	2
4972	4.0	107	S	73	E	27	2.1	320	N	40	W	85	124	8.5	8.8	33	2
4976	5.1	360		NORTH		51	2.0	320	N	40	W	83	122	8.5	8.8	23	2
4980	3.1	242	S	62	W	100	2.1	319	N	41	W	80	120	8.4	8.7	27	1
4984	10.2	48	N	48	E	100	2.2	319	N	41	W	77	117	8.4	8.7	17	4
4988	1.5	14	N	14	E	100	2.2	320	N	40	W	74	113	8.4	8.7	26	2
4992	1.0	173	S	7	E	11	2.2	322	N	38	W	72	110	8.4	8.7	23	2
4996	12.7	27	N	27	E	56	2.2	323	N	37	W	72	108	8.4	8.7	16	4
5000	1.5	21	N	21	E	100	2.3	325	N	35	W	72	106	8.4	8.7	39	1
5004	1.4	5	N	5	E	100	2.0	325	N	35	W	71	106	8.4	8.7	45	1
5008	6.5	42	N	42	E	36	2.0	326	N	34	W	70	104	8.4	8.7	23	2

5020	2.9	247	S	67	W	100	2.0	325	N	35	W	70	104	8.4	8.7	47	2
5024	3.7	234	S	54	W	37	2.1	325	N	35	W	68	102	8.4	8.7	42	2
5028	2.9	219	S	39	W	14	2.1	327	N	33	W	67	100	8.4	8.7	25	1
5040	20.3	228	S	48	W	37	1.8	341	N	19	W	58	76	8.3	9.2	60	3
5048	11.2	357	N	3	W	0	1.9	353	N	7	W	42	48	8.4	8.7	12	1
5052	11.0	243	S	63	W	0	2.0	353	N	7	W	43	49	8.4	8.7	3	2
5056	28.0	226	S	46	W	61	2.1	349	N	11	W	44	54	8.4	8.8	9	1



EUGENE DIETZGEN CO.
MADE IN U. S. A.
NO. 340-P DIETZGEN GRAPH PAPER
POLAR CO-ORDINATE



EUGENE DIETZGEN CO.
MADE IN U. S. A.
NO. 340-P DIETZGEN GRAPH PAPER
POLAR CO-ORDINATE

PLACID OIL COMPANY
DALLAS, TEXAS
Well Cost Estimate and Analysis of Well Costs

Copies to: Mr. Dalton, Mr. Barber, Mr. Burow, Mr. Bray, Mr. Don Smith

Type of Well D&A Estimated Depth 5000' Drilling Contractor Arapahoe Drilling Co
Ownership: Placid 100 % Other
Superintendent R. L. Bray Address Woodgine, La.
Cost Estimate by None Furnished Date Analysis of Well Cost by Jim Jordan Date 3-9-71

EQUIPMENT QUANTITY ESTIMATED DRY HOLE	PRODUCER	ACTUAL	TANGIBLE EQUIPMENT DESCRIPTION	COST ESTIMATED DRY HOLE	PRODUCER	ACTUAL
			Casing			
		588'	9 5/8" 36# Casing			2,721
			Tubing			
			TOTAL WELL EQUIPMENT			2,721

INTANGIBLE COSTS:

To Drill ____ ft. @ $ ____ per ft. (____ Days) Estimated			–
____ ft. @ $ ____ per ft. (____ Days) Actual			
Day Work W/ Drill pipe ____ days @			
29.90 days @ 1585/Day - Actual			47,401
Day Work W/O Drill Pipe ____ days @			
5.39 days @ 1500/Day - Actual			8,094
Drill Pipe Rental			
Drill Tool Rental			
Other Rentals			
Labor			
Superintendence			1,593
Hauling			10,494
Boat & Barge			–
Fuel			–
Water			608
Bits			10,591
Drilling Mud & Chemicals			27,187
Guide & Float Shoes, Collars, Centralizers & Scratchers			335
Other Material & Supplies			–
Road, Bridges, Canals			25,304
Special Surveys			8,877
Sidewall Cores & Analysis			1,298
Drill Stem Tests			–
Directional Surveys			–
Cement for Casing, etc.			3,681
Cementing Service for Casing, etc.			988
Swabbing			–
Acidizing and Fracturing Service			150
Perforating			–
Squeeze Job			–
Miscellaneous * See Below			17,852
Total Intangibles			164,453
Total Well Costs			(167,174)
Less Contributions			
Net Well Costs			
Tank Battery (if necessary)			
Pumping Unit (if necessary)			
Other Equipment			
Total			

* Miscellaneous Charges:

Rig Move	$ 9,200
Misc. Items Under $200	547
Well Testing	4,414
Cut & Laboratory Cores	1,739
Plug & Abandon	1,314
Depreciation	648
	$ 17,852

Lease U.S.A. #W-1 Well No. #1 Drilling Well AFE No. 8196
Location Sec. 27 T 28S R 12E
Field Wildcat County/Parish Wayne State Utah
Date Spudded 8-24-70 Date Completed 9-25-70 Total Days 35 Total Depth 5052'
Average DWC Cost Per Day $ 4,660.

Form 9-331
(May 1963)

U TED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIP ATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
Utah 01457781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
---

7. UNIT AGREEMENT NAME
---

8. FARM OR LEASE NAME
U.S.A.

9. WELL NO.
DU-1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 27, T28S-R17E

12. COUNTY OR PARISH
Wayne

13. STATE
Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER Dry Hole

2. NAME OF OPERATOR
Placid Oil Company

3. ADDRESS OF OPERATOR
2008 United Bank Center, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
NW NW (820' FNL & 1145' FWL) of Section 27, T28S - R17E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4352' G.L.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)	
(Other)					

(NOTE: Report results of multiple completion on Well Completion or Recomplection Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Plugged and Abandoned on 9-25-70 as Follows:

4562-4464 w/35 sks.
2741-2643 w/35 sks.
920- 822 w/35 sks.
545- 409 w/50 sks.
10 sacks in top of casing.

Installed Dry Hole Marker

RECEIVED
BR. OF OIL & GAS OPERATIONS
U. S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

18. I hereby certify that the foregoing is true and correct

SIGNED James D. Murphree TITLE District Geologist DATE 9-28-70
James D. Murphree

(This space for Federal or State office use)

APPROVED BY Gerald R. Daniels TITLE DISTRICT ENGINEER DATE
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER Dry Hole

2. NAME OF OPERATOR
Placid Oil Company

3. ADDRESS OF OPERATOR
2008 United Bank Center, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
NW NW (820' FNL & 1145' FWL) of Section 27, T28S - R17E

5. LEASE DESIGNATION AND SERIAL NO.
Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
—

7. UNIT AGREEMENT NAME
—

8. FARM OR LEASE NAME
U.S.A.

9. WELL NO.
DU-1

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 27, T28S-R17E

12. COUNTY OR PARISH: Wayne
13. STATE: Utah

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4352' G.L.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐
REPAIR WELL	☐	CHANGE PLANS	☐	REPAIRING WELL	☐
(Other)				ALTERING CASING	☐
				ABANDONMENT*	☐
				(Other)	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Verbal Approval was given on 24 September 1970, by Mr. Jerry Daniel for the following plugging procedures.

4562'-4464' w/35 sacks; 2741'-2643' w/35 sacks; 920'-822' w/35 sacks; 543'-409' w/50 sacks; 10 sacks in top, and install dry hold marker.

RECEIVED
BR. OF OIL & GAS OPERATIONS
OCT 30 1970
U. S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

18. I hereby certify that the foregoing is true and correct

SIGNED James D. Murphree TITLE District Geologist DATE 9-28-70
James D. Murphree

(This space for Federal or State office use)

APPROVED BY Gerald R. Daniels TITLE DISTRICT ENGINEER DATE
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

November 10, 1970

Continental Trailways
315 Continental Avenue
Dallas, Texas 75207

Attention: Mr. V. C. Lewis:

COPY

On 27 September Core Laboratories, Inc. shipped six (6) parcels from Casper, Wyoming, to our Denver office. This shipment was received by the Denver Trailway Terminal the following day with instructions to call this office upon arrival.

One month later on 28 October Mr. Jim Murphree, from this office, called the Trailway Station to check on this shipment. Mr. Murphree was advised that five (5) of the six (6) parcels were there but they were unable to locate the sixth piece. When asked why we were never notified no one could give us an answer.

A request was made to have a tracer put on the package and we were told this would be done as soon as possible. Yesterday, 9 November, Mr. Murphree again called the Trailway Station to check on the tracer. Again he was given the runaround. No one seemed to know if a tracer had in fact been initiated.

The package missing consists of oil well cuttings which we have rented and is costing this company one dollar a day which amounts to forty-five dollars to date.

This company has done a considerable amount of shipping with your organization in the past and feel the service now being received is extremely poor, and not in the best interest of Continental Trailways.

Your immediate attention to this matter will be greatly appreciated as the recovery of this parcel is most important.

We feel that due to the neglect of someone in the terminal here, failing to notify us on the arrival of the first five parcels, the change for recovery of the sixth piece is very slim at this time.

Your attention and cooperation in this matter will be greatly appreciated.

Thanking you in advance, I remain

Yours very truly,

Jim Wages
Office Manager

JW/kp
cc: Continental Trailways Denver

PLACID OIL COMPANY NO. DU-1 USA

Core Description

Core No. 1

Interval: 4793-4843 (50') Recovery 50'

Description:

4793-4843 (50') Dolomite - lt. gray, fine-med xln., Crinoidal, Vuggy (Pin point - 3 mm dia.) fr. - gd. P&P, Sli. Oil & Sulfur odor on fresh break, fnt. salty taste, pale silvery fluor. around many of the mugs, good cut w/ CEl_4, scattered heavy asphaltic residue, no other visible staining, oil shows diminish toward bottom of core.

file

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ——

7. UNIT AGREEMENT NAME: ——

8. FARM OR LEASE NAME: U.S.A.

9. WELL NO.: DU-1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 27, T28S-R17E

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

1. OIL WELL ☐ GAS WELL ☐ OTHER: Dry Hole

2. NAME OF OPERATOR: Placid Oil Company

3. ADDRESS OF OPERATOR: 2008 United Bank Center, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: NW NW (820' FNL & 1145' FWL) of Section 27, T28S - R17E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4352' G.L.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐
REPAIR WELL	☐	CHANGE PLANS	☐
(Other)			☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☒
(Other)			

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Plugged and Abandoned on 9-25-70 as Follows:

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2741-2643 w/35 sks.
920- 822 w/35 sks.
545- 409 w/50 sks.
10 sacks in top of casing.

Installed Dry Hole Marker

18. I hereby certify that the foregoing is true and correct

SIGNED James D. Murphree TITLE District Geologist DATE 9-28-70

James D. Murphree

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
(May 1963)

L TED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRI CATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

7. UNIT AGREEMENT NAME: ---

1. OIL WELL ☐ GAS WELL ☐ OTHER Dry Hole

2. NAME OF OPERATOR: Placid Oil Company

8. FARM OR LEASE NAME: U.S.A.

3. ADDRESS OF OPERATOR: 2008 United Bank Center, Denver, Colorado 80202

9. WELL NO.: DU-1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: NW NW (820' FNL & 1145' FWL) of Section 27, T28S - R17E

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 27, T28S-R17E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4352' G.L.

12. COUNTY OR PARISH: Wayne

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☒	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Verbal Approval was given on 24 September 1970, by Mr. Jerry Daniel for the following plugging procedures.

4562'-4464' w/35 sacks; 2741'-2643' w/35 sacks; 920'-822' w/35 sacks; 545'-409' w/50 sacks; 10 sacks in top, and install dry hold marker.

18. I hereby certify that the foregoing is true and correct

SIGNED James D. Murphree TITLE District Geologist DATE 9-28-70

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Placid Oil Company

3. ADDRESS OF OPERATOR: 2008 United Bank Center, Denver, Colorado 80202

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 820' FNL & 1145' FWL of Section 27, T28S-R17E
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0145781
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---
7. UNIT AGREEMENT NAME: ---
8. FARM OR LEASE NAME: U.S.A.
9. WELL NO.: DU-1
10. FIELD AND POOL, OR WILDCAT: Wildcat
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 27, T28S-R17E

14. PERMIT NO. / DATE ISSUED: 8-18-70
12. COUNTY OR PARISH: Wayne
13. STATE: Utah

15. DATE SPUDDED: 8-24-70
16. DATE T.D. REACHED: 8-23-70
17. DATE COMPL. (*Ready to prod.*)
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 4352' G.L.
19. ELEV. CASINGHEAD: 4352

20. TOTAL DEPTH, MD & TVD: 5075'
21. PLUG, BACK T.D., MD & TVD
22. IF MULTIPLE COMPL., HOW MANY*: N/A
23. INTERVALS DRILLED BY → ROTARY TOOLS: 0-5075' CABLE TOOLS:

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
25. WAS DIRECTIONAL SURVEY MADE: Yes-2 3/4°

26. TYPE ELECTRIC AND OTHER LOGS RUN: Sidewall Neutron, Continuous Dip Meter, Laterlog - Formation Density Log
27. WAS WELL CORED: 49' Core

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#	549'	13 3/4"	480 sks CL-A, 2% c.c.	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION | PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*) | WELL STATUS (*Producing or shut-in*)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED James D. Murphree — TITLE District Geologist — DATE 9-28-70

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
White Rim Sand	80	350	Sandstone-wh, clear, vfg., calc, v. silty in part, good porosity & Permeability, fresh water bearing
Mississippian	4782	5075 (TD)	Dolomite -Cream-tan, vuggy, crinoid molds, good porosity & permeability, dead oil stain - water bearing

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
White Rim	80'	Same
Cutler	500'	
Wolfcamp Carbonates	1090'	
Upper Hermosa	1580'	
Ismay	2467'	
First Paradox Salt	2740'	
Desert Creek	2825'	
B/Paradox Salt	4090'	
Mississippian	4562'	

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