

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
Halport Oil Corporation

3. ADDRESS OF OPERATOR
5471 First National Bank Bldg., Dallas, Texas

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface **660' FWL, 1939' FWL**
At top prod. interval reported below **same**
At total depth **same**

14. PERMIT NO. _____ DATE ISSUED **APR 3 1973**

5. LEASE DESIGNATION AND SERIAL NO.
NO 0507217

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Sun-Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Undesignated

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
1S - 150-300

12. COUNTY OR PARISH
Chaves

13. STATE
New Mexico

15. DATE SPEC'DDED **2-20-73** 16. DATE T.D. REACHED **2-27-73** 17. DATE COMPL. (Ready to prod.) **3-28-73** 18. ELEVATIONS (DF, REB, RT, GR, ETC.)* **3081 NB** 19. ELEV. CASINGHEAD **3909**

20. TOTAL DEPTH, MD & TVD **3005** 21. PLUG, BACK T.D., MD & TVD **2502** 22. IF MULTIPLE COMPL., HOW MANY* **→** 23. INTERVALS DRILLED BY **→** ROTARY TOOLS **X** CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Queen 2303-1/2 - 72

26. TYPE ELECTRIC AND OTHER LOGS RUN
Western gamma ray

27. WAS WELL CORED
original - yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	24	336	11	200 Sx circulated	NONE
4-1/2 used	21.5	2502	7-7/8	150 Sx lite, 125 Sx 'C' 50# 102 # salt/sack 2# gel	NONE

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8 new	2336.5	NONE

31. PERFORATION RECORD (Interval, size and number)

2303-1/2 - 72, extra holes 2366-1/2, 2367, total 20 holes; J-II strip gun, .41" holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
2363-1/2 - 72	100 gal acetic, 750 gal 7-1/2% HCl acid, 25,000 gal H ₂ O water, 20,000# 20-40 sand, 5,000# 10-20 sand

33.* PRODUCTION

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

DATE OF TEST **3-20-73** HOURS TESTED **7 1/2** CHOKER SIZE _____ PROD'N. FOR TEST PERIOD **→** OIL—BBL. _____ GAS—MCF. _____ WATER—BBL. **0** GAS-OIL RATIO _____

FLOW. TUBING PRESS. **465** CASING PRESSURE **575** CALCULATED 24-HOUR RATE **→** OIL—BBL. _____ GAS—MCF. **1365** WATER—BBL. **0** OIL GRAVITY-API (CORR.) _____

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) **NONE** TEST WITNESSED BY **John West Co.**

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 H. Sampson* TITLE Geologist DATE 3-23-73

*(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.	GEOLOGIC MARKERS	
	MEAS. DEPTH	TRUE VERT. DEPTH			NAME	MEAS. DEPTH
Waterferry-Triassic	0					
Kustler	812		812	Red beds, red sand	Kustler	812
Salado	910		910	Anhydrite, red beds	Salado	910
Tansill	1460		1460	Salt	Tansill	1460
Yates	1610		1610	Dolomite, anhydrite, salt	Yates	1610
Seven Rivers	1730		1730	Red sand, red shale, salt	Seven Rivers	1730
Queen	2363		2363	Dolomite, anhydrite, salt, red sand Gy and red sand, anhydrite	Queen	2363

38.

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U.S. GOVERNMENT PRINTING OFFICE
NOV 28 1963

RECEIVED
APR 2 1973
SURVEY
NEW MEXICO

C.C.C. ROSWELL OFFICE COPY
NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AC ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-127
Revised 6-1-70

<input checked="" type="checkbox"/> Initial		<input type="checkbox"/> Annual		<input type="checkbox"/> Special		Test Date 3-20-73	
Company DALPORT OIL CORP.				Correlation To AIR			
Well UNDESIGNATED				Location QUEEN			
Completion Date 3-10-73		Total Depth 2501		Plug back TD 2440		Elevation 3969 GR.	
Well No. 41		Set At 2501		Perforations: From 2363 To 2372		Well No. 1	
Well Size 2 3/8		Set At 2336		Perforations: From OPEN To ENDED		Unit Sec. Twp. Range C 13 13S 30E	
Type of Well - Single - Broadhead - C.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. *F 95°F @ 2400'		Mean Annual Temp. *F 60		Baro. Press. - P _a 13.2	
State NEW MEXICO		L 2336		H 2336		C _g 0.910	
		% CO ₂		% N ₂ 69.0		% H ₂ S	
		P _{gs} 2 3/8 & 4" O.W.T		Motor Run		Type	

FLOW DATA				TUBING DATA			CASING DATA		Duration of Flow		
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. XX	Temp. *F	Press. p.s.i.g.	Temp. *F		Press. p.s.i.g.	Temp. *F
SI					(MERCURY)		855.0		875.0		24 HRS
1.	2" OWT X 0.50"				14.0		650.0	57	868.0		2.0
2.	4" " X 1.25"				10.0		618.0	57	822.0		2.0
3.	4" " X 2.00"				18.0		485.0	57	578.0		1.5
4.	4" " X 2.00"				22.0		374.0	57	489.0		1.0
5.	4" " X 2.00"				25.0		240.0	54	401.0		1.0

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	VOLUME BEFORE CORRECT	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	VOLUMES	86.81			.8121		70.5
2	OBTAINED	434.1			.8121		352.5
3	FROM GOR	1629.0			.8121		1323.0
4	TEST	1835.0			.8121		1490.0
5	MANUAL	1982.0			.8121		1610.0

NO.	P _r	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/cub.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas 0.910 X X X X X X X X X X
3					Specific Gravity Flowing Fluid X X X X X
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

P _c 888.2	P _c ² 788.9				
NO.	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2780$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1580$
1	439.8	881.2	776.5	12.4	
2	398.4	835.2	697.6	91.3	
3	248.2	591.2	349.5	439.4	
4	149.9	502.2	252.2	536.7	
5	64.11	414.2	171.6	617.3	

AOB = Q	$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1865$
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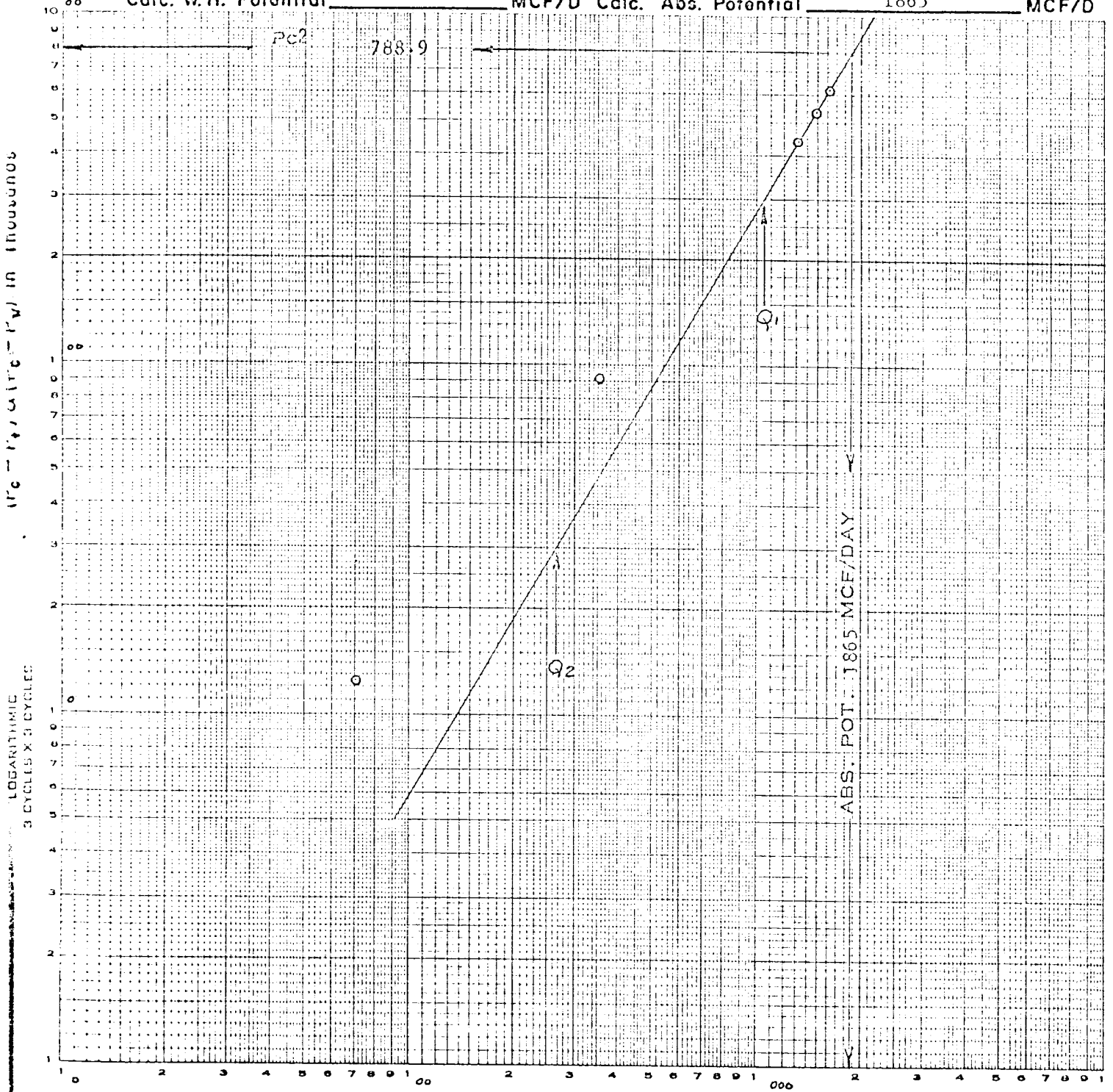
AOB = 1865 Mcfd @ 15.025	Angle of Slope $\theta = 59.1^\circ$	Slope, n = 0.598
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REMARKS: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA BOMB @ 2400 FEET

Approved by Commission:	Conducted By: M. C. T.	Calculated By: R. L. W.	Checked By: J. W. W.
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BACK PRESSURE CURVE

Operator DALPORT OIL CORP. Lease SUN FEDERAL Well No. 1
 County CHAVES Field UNDESIGNATED Location C-SEC 13-T13S-R30E
 Date of Test 3-20-73 Slope "n" 0.598 W. H. _____ Abs. _____
 Calc. W. H. Potential _____ MCF/D Calc. Abs. Potential 1865 MCF/D



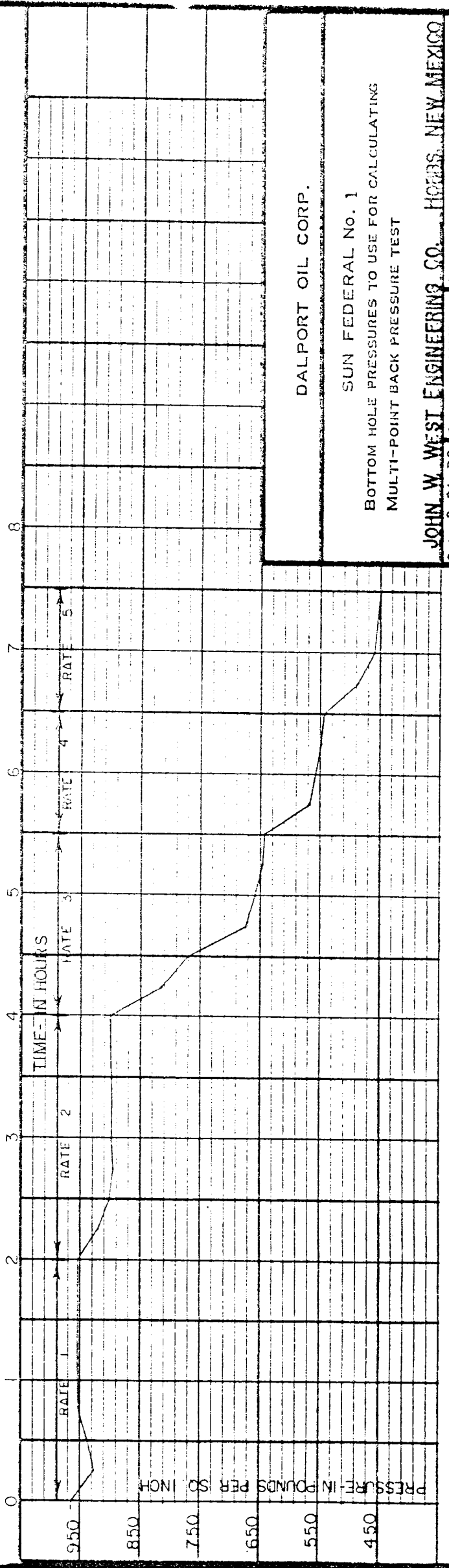
SLOPE (n) = $Q_1 = 1050 = 7.0211893$
 $Q_2 = 265 = \frac{6.4232459}{0.5979434}$

ABS. POT. = $1610 \left(\frac{788.9}{617.3} \right)^{.598} = 1865 \text{ MCF/D}$

9000

TEST DATE: MARCH 20, 1973
 TEST DEPTH: 2400 FEET
 ELEMENT No.: 18948-N
 RANGE: 0-3100 P S I
 CLOCK No.: 4052
 RANGE: 0-12 HOUR

NOTE: SEE TABULATION OF PRESSURE AND TIME ON ATTACHED SHEET.



DALPORT OIL CORP.

SUN FEDERAL No. 1

BOTTOM HOLE PRESSURES TO USE FOR CALCULATING
 MULTI-POINT BACK PRESSURE TEST

JOHN W. WEST ENGINEERING CO. HOBBES, NEW MEXICO
 Date: 3-24-73 Drawn by: MCT Scale: AS SHOWN

DALPORT OIL CORPORATION
 SUN FEDERAL No. 1
 PRESSURES TO USE IN CALCULATING MULTI-POINT
 BACK PRESSURE TEST
 TABULATION OF PRESSURE AND TIME

TEST CONDUCTED BY:
 WEST ENGINEERING Co.

TEST DATE: MARCH 20, 1973
 TEST DEPTH: 2400 FEET
 ELEMENT No.: 18948-N (0-3100 P S I)
 OPER.: M.C.T.

<u>TIME</u>	<u>CUM. HRS/MIN</u>		<u>P S I G @ 2400 FEET</u>
11:45 AM			957 GAUGE REACHED 2400 FEET
12:00 NOON	00 HRS	00 MIN	967 OPENED CHOKE
	00	15	928
	00	30	939
	00	45	951
	01	00	953
	01	15	953
	01	30	953
	01	45	953
2:00 PM	02	00	953 END RATE 1
2:00 P.M.	02	00	953 BEGIN RATE 2
	02	15	923
	02	30	903
	02	45	897
	03	00	904
	03	15	901
	03	30	901
	03	45	903
4:00 P.M.	04	00	903 END RATE 2
4:00 P.M.	04	00	903 BEGIN RATE 3
	04	15	817
	04	30	770
	04	45	677
	05	00	658
	05	15	647
5:30 P.M.	05	30	646 END RATE 3
5:30 P.M.	05	30	646 BEGIN RATE 4
	05	45	569
	06	00	558
	06	15	550
6:30 P.M.	06	30	545 END RATE 4
6:30 P.M.	06	30	545 BEGIN RATE 5
	06	45	487
	07	00	450
	07	15	454
	07	30	451 END RATE 5. GAUGE OUT AND