

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions 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 _____				5. LEASE DESIGNATION AND SERIAL NO. NM-14791			
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____				6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----			
2. NAME OF OPERATOR Cleary Petroleum Corporation				7. UNIT AGREEMENT NAME -----			
3. ADDRESS OF OPERATOR P. O. Drawer 2358, Midland, Tx., 79701				8. FARM OR LEASE NAME New Mexico Federal "B"			
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 3300' FSL & 1980' FWL At top prod. interval reported below At total depth				9. WELL NO. -----			
14. PERMIT NO. Letter				DATE ISSUED 6-8-76			
15. DATE SPEUDED 7-28-76				16. DATE T.D. REACHED 9-24-76			
17. DATE COMPL. (Ready to prod.) 10-8-76				18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3722' GL Ref. KB 3742'			
19. ELEV. CASINGHEAD 3721'				20. TOTAL DEPTH, MD & TVD 14200'			
21. PLUG BACK T.D., MD & TVD 14169'				22. IF MULTIPLE COMPL. HOW MANY* ---			
23. INTERVALS DRILLED BY -->				24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)* 13734 - 14119' Morrow			
25. TYPE ELECTRIC AND OTHER LOGS RUN GR-Neutron Compensated Acoustic Log, Velocity Log, Forxo Guard Log				26. WAS DIRECTIONAL SURVEY MADE No			
27. WAS WELL CORED No				28. WAS WELL CORED No			
29. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED		
16"	65#	462' KB	20"	700 sx	--		
9 5/8"	53.5 & 40#	5601'	12 3/4"	1st stage - 1150 sx, DV	--		
				tool set @ 3348', 2nd-2100 sx	--		
5 1/2"	23, 20, & 17#	14200'	7 7/8"	675 sx	--		
30. LINER RECORD			31. TUBING RECORD				
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	13630'	13630'
32. PERFORATION RECORD (Interval, size and number)				33. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
13734 - 14119' 0.33" hole 79 holes (See attachment for individual intervals)				DEPTH INTERVAL (MD) 13734 - 14119'			
				AMOUNT AND KIND OF MATERIAL USED Acidized w/4000 gals of Morrowflow acid.			
34. PRODUCTION							
DATE FIRST PRODUCTION 10-19-76		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing		WELL STATUS (Producing or shut-in) Shut-in			
DATE OF TEST 10-21-76	HOURS TESTED 3	CHOKE SIZE 16/64"	PROD'N. FOR TEST PERIOD -->	OIL--BBL. 8	GAS--MCF. 445	WATER--BBL. 13 (Acid)	GAS-OIL RATIO 55625
FLOW. TUBING PRESS. 2700	CASING PRESSURE Pkr.	CALCULATED 24-HOUR RATE -->	OIL--BBL. 64	GAS--MCF. 3560	WATER--BBL. 104	OIL GRAVITY-API (CORR.) 48	
35. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Transporter to be Gas Company of New Mexico				TEST WITNESSED BY Doyle Conway			
36. LIST OF ATTACHMENTS Perforation Record, C-122, Deviation Report, (Logs were previously submitted to USGS)							
37. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED _____		TITLE Assistant District Manager		DATE 11-16-76			

*(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 CORED INTERVALS, FLOWING AND SHUT-IN PRESSURES, AND REACTORIES

DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND REACTORIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	GEOLOGIC MARKERS	
					MEAS. DEPTH	TRUE VERT. DEPTH
Morrow	13734	14119	Sand - Gas & Condensate	Anhydrite	1482'	NA
Strawn	12720	12776	Drill - Stem Tests:	Base Salt	3274'	NA
			#1 4000' of water cushion; tool opened @ 11:30 a.m. on 9-13-76; packers failed; recovered water cushion & drilling mud.	Yates	3386'	NA
			#2 4000' of water cushion; tool opened @ 6:25 p.m. on 9-14-76; packers failed; recovered 4000' heavily gas cut water cushion & 1800' heavily gas cut drilling mud.	Capitan Reef	3556'	NA
	12740	12790		Bone Springs	8650'	NA
				Wolfcamp	11164'	NA
				Strawn	12730'	NA
				Atoka	12872'	NA
				Morrow	13634'	NA
				Lower Morrow	14055'	NA

OIL CONSERVATION COMMISSION

BOX 2045

HOBBS, NEW MEXICO

NOTICE OF GAS CONNECTION

DATE 3/9/77

This is to notify the Oil Conservation Commission that connection for the purchase of gas from the Cleary Petroleum Corp., New Mexico Federal B,
Operator Lease

#1, N, 3-21S-32E, Undesignated Morrow,
Well # Unit Letter S.T.R. Pool

GAS COMPANY OF NEW MEXICO, was made on March 9, 1977.
Name of Purchaser Date

GAS COMPANY OF NEW MEXICO
PURCHASER

James L. Coar
REPRESENTATIVE

Transmission Manager
TITLE

cc: Oil Conservation Commission - Santa Fe
E. R. Corliss - Dallas
W. B. Richardson - Dallas
R. J. McCrary - Dallas
E. H. Redden - Carlsbad
Operator(s):

Cleary Petroleum Corporation
710 The Main Building
Houston, Texas 77002

Southern Union Production Company
Suite 1700 Campbell Centre
8250 North Central Expressway
Dallas, Texas 75206

DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.P.	
LAND OFFICE	
TRANSPORTER	OIL
	GAS
OPERATOR	
PRORATION OFFICE	

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

Operator Cleary Petroleum Corporation	
Address P. O. Drawer 2358, Midland, Texas 79701	
Reason(s) for filing (Check proper box)	
New Well ☒	Change In Transporter of:
Recompletion ☐	Oil ☐ Dry Gas ☐
Change In Ownership ☐	Casinghead Gas ☐ Condensate ☐

If change of ownership give name
and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

Lease Name New Mexico Federal "B"	Well No. 1	Pool Name, including Formation Undesignated	Kind of Lease State, Federal or Free Federal	Lease No. NM-14791
Location				
Unit Letter N	3300	Feet From The South	Line and 1980	Feet From The West
Line of Section 3	Township 21-S	Range 32-E	NMPM Lea	County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☒	Address (Give address to which approved copy of this form is to be sent) P. O. Box 1183, Houston, Tx. 77001	
Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☒	Address (Give address to which approved copy of this form is to be sent) First International Bldg., Dallas, Tx. 75270	
Name of Well, or oil or liquid, or gas, or condensate, or other	Unit M	Sec. 3
	Line 21-S	Range 32-E
No (approx. expected connection date 12-15-76)		

If this pool is connected with that from any other lease or pool, give name of lease and number

COMPLETION DATA

Designate Type of Completion - (X)	Oil Well ☒	Gas Well ☒	Water Well ☐	Other ☐	Deepen ☐	Plug Back ☐	Same Res'ty. ☐	Diff. Res'ty. ☐
Date Began 7-28-76	Date Compl. Ready to Prod. 10-8-76	Total Depth 14200'	P.B.T.D. 14169'					
Elevations (OF, RKB, RI, GR, etc.) 3722' GL, KB 3742'	Name of Producing Formation Morrow	Top Oil Gas Pay 13734'	Tubing Depth 13630'					
Perforations 13734 - 14119' (See attachment for individual intervals)			Depth Casing Shoe					
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE 20"	CASING & TUBING SIZE 16"	DEPTH SET 462' KB	SACKS CEMENT 700 sx					
12 3/4"	9 5/8"	5601'	1st stg.-1150; 2nd-2100					
7 7/8"	5 1/2"	14200'	675 sx					
--	2 7/8"	13160'	--					

V. TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours

Date Started New Oil Run To Tanks	Date of Test	Producing Method (Flow pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Length of Test 3 Hrs.	Bbls. Condensate/MCF 17.98	Gravity of Condensate 48
Testing Method (pilot, back prod) Orifice Meter	Tubing Pressure (Shut-in) 4750	Casing Pressure (Shut-in) Pkr.
		Choke Size 16/64"

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

(Signature)
Assistant District Manager
(Title)
11-16-76
(Date)

OIL CONSERVATION COMMISSION

APPROVED _____, 19____
BY _____
TITLE _____

This form is to be filed in compliance with RULE 1104.
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.
All sections of this form must be filled out completely for allowable on new and recompleted wells.
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter or other such change of condition.
Separate Forms C-104 must be filed for each pool in multiply completed wells.

NEW MEXICO FEDERAL "B" #1
PERFORATION RECORD

<u>Depth</u>	<u>No. Ft.</u>	<u>No. Holes</u>	<u>Hole Size</u>
13734 - 46	12	13	0.33"
13763 - 66	3	4	0.33"
13776 - 84	8	8	0.33"
13830 - 52	22	23	0.33"
13895 - 99	4	3	0.33"
13940 - 42	2	3	0.33"
13982 - 86	4	5	0.33"
14062 - 64	2	3	0.33"
14083 - 91	8	9	0.33"
14099 - 101	2	3	0.33"
14115 - 119	<u>4</u>	<u>5</u>	0.33"
Total	71	79	

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE
(Other instructions
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		5. LEASE DESIGNATION AND SERIAL NO. NM-14791
2. NAME OF OPERATOR Cleary Petroleum Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P. O. Drawer 2358, Midland, Texas 79701		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 3300' FSL & 1980' FWL		8. FARM OR LEASE NAME New Mexico Federal "B"
14. PERMIT NO. Letter dated 6-8-76		9. WELL NO. 1
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 3722' GL & 3742' KB		10. FIELD AND POOL, OR WILDCAT Undesignated
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 3, T-21-S, R-32-E
		12. COUNTY OR PARISH Lea
		13. STATE N. M.

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETION

ABANDON*

CHANGE PLANS

X

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 (Copy 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.)*

Perforations in the Strawn zone from 12740'-62' proved to be non-commercial.

Latest swab test on 12-8-76 yielded 5 bbls. of acid water w/a trace of oil in 3 hrs. w/only 400' of fluid in the hole after 14 hr. shut-in.

Cleary Petroleum Corporation proposes to pull 2 7/8" tubing, pkr., & retrievable bridge plug. Re-run 2 7/8" tubing, overshot seal divider, & seal assembly, latch into permanent packer @ 13,630'. Pull Otis plug from "N" nipple, & re-establish production from the Morrow perforations. The unproductive Strawn would be isolated behind the 2 7/8" tubing. Wait on sales line to produce Morrow.

APPROVED

DEC 11 1976

BERNARD JACCOZ

DISTRICT ENGINEER

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

SIGNED _____

TITLE Assistant District Manager DATE 12-10-76

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

*See Instructions on Reverse Side

ACCEPTED FOR RECORD

DEC 13 1976

GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-21-76				
Company CLEARY PETROLEUM CORP.					Connection AIR				
Pool HAT MESA					Formation MORROW				
Completion Date 10-8-76		Total Depth 14200		Mud Bit ID 14169		Elevation 3722GL		Owner or Lease Name NEW MEXICO FED.B.	
Coq. Size 5 1/2	Wt. 17823	d 14200	Set At 14200	Perforations: From 13734 To 14119		Well No. # 1			
Trq. Size 2 7/8	Wt. 10/80	d 13160	Set At 13160	Perforations: From To		Unit Sec. Twp. Rge. 3 21S 32E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At 13630		County LEA		
Producing Thru TUBING		Reservoir Temp. °F 184		Mean Annual Temp. °F 60		Basic Press. - P _b 13.2		State NEW MEXICO	
L 13630	H 13630	Gg 6395	% CO ₂ 994	% N ₂ 657	% H ₂ S	Prover	Meter Run 4"	Taps FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. psid, q.	Diff. in W	Temp. °F	Press. psid, q.	Temp. °F	Press. psid, q.	
SI							4750		PKR	30 HOURS
1.	4	X	1.750	567	58	73	2700	71		16/64 3 HOURS
2.	4	X	1.750	567	34	74	3060	70		13/64 1 HOUR
3.	4	X	1.750	567	21	71	3420	72		10/64 1 HOUR
4.	4	X	1.750	567	8	82	3750	67		7/64 1 HOUR
5.										

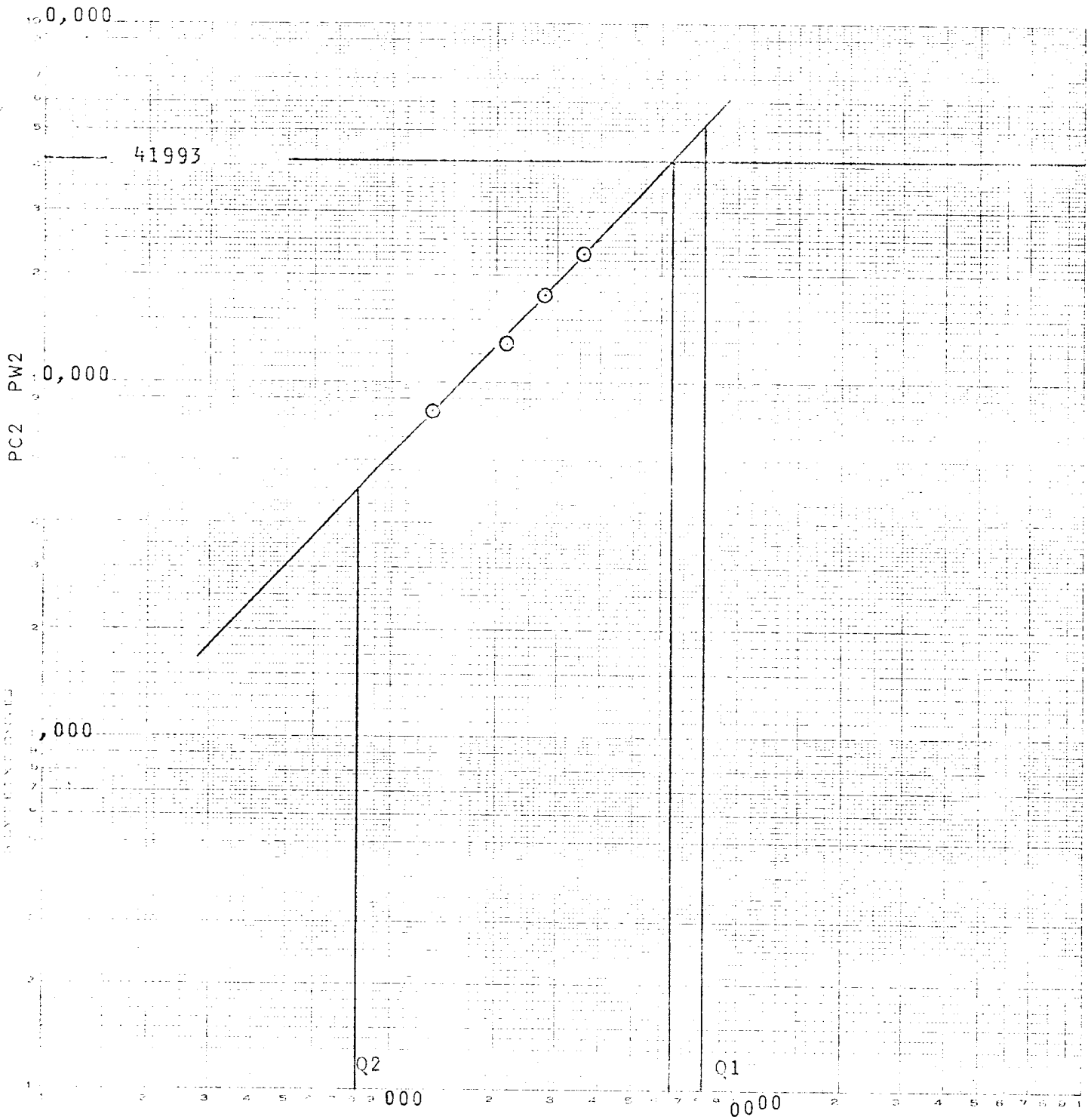
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mhd
1	14.93	183.39	580.2	.9877	1.251	1.052	3559
2	14.93	140.41	580.2	.9868	1.251	1.050	2717
3	14.93	110.35	580.2	.9896	1.251	1.052	2146
4	14.93	68.09	580.2	.9795	1.251	1.048	1305
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	.870	533	1.46	.905	36.525	
2	.870	534	1.47	.907	48 @ 60°	
3	.870	531	1.46	.905	.6395	XXXXXXX
4	.870	542	1.49	.911	670 ± 4 - 1 = 667	667 P.S.I.A.
5					368 ± 1 - 3 = 364	364 R

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	64802	41993	19036	22957	1.83	1.83
2		4949	24493	17500		
3		5393.2	29087	12906		
4		5801	33654	8339		
5						

Absolute Open Flow		6513	Mhd @ 15.025	Angle of Slope	45°	Slope, n	1°
Remarks: PC & AW WERE TAKEN OFF OF AMERADA GAUGE RPG=B SERIAL NO. 38776							
Approved By Commission		Conducted By:		Calculated By:		Checked By:	
J. S.		LARRY DAVIS		LARRY DAVIS			

CLEARY PETROLEUM CORP.
 NEW MEXICO FED. B # 1
 LEA COUNTY
 10-21-76



Q, MCFD		
Q1=	8000 MCFD LOG OF Q1	3,9030900
Q1=	800 MCFD LOG OF Q2	2,9030900
		<u>1,0000000</u>

PHONE
505 393-7616



P. O. BOX 2099
HOBBS, NEW MEXICO 88240

BOTTOM HOLE PRESSURE RECORD

OPERATOR CLEARY PETROLEUM CORP.
 FIELD FORMATION MORROW
 LEASE N.M. FED. B. WELL # 1
 COUNTY LEA STATE N.M.
 DATE 10-21-76 TIME 10:30AM
 Status SHUT IN Test depth 13926.5
 Time S. I. 30 HOUR Last test date
 Tub Pres. 4750 DWI BHP last test
 Cas. Pres. BHP change
 Elev. 3722 GL Fluid top 3400
 Datum Water top
 Temp. @ 180 Run by DAVIS
 Cal. No. 38776 Chart No. # 1

Depth	Pressure	Gradient
0	4750	
2000	4794	.022
4000	4924	.065
6000	5181	.129
8000	5459	.139
10000	5737	.139
12000	5961	.1120
13000	6225	.264
13600	6383	.265
139265	6467	

Pressure * MID POINT

