

Case No.

6902

Application

Transcripts

Small Exhibits

ETC

CASE 6002: HARVEY E. YATES COMPANY FOR
A FULL COMPLETION, LEA COUNTY, NEW
MEXICO

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6902
Order No. R-6363

APPLICATION OF HARVEY E. YATES
COMPANY FOR A DUAL COMPLETION,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on May 21, 1980,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 5th day of June, 1980, the Division
Director, having considered the testimony, the record, and the
recommendations of the Examiner, and being fully advised in the
premises,

FINDS:

- (1) That due public notice having been given as required
by law, the Division has jurisdiction of this cause and the
subject matter thereof.
- (2) That the applicant, Harvey E. Yates Company, seeks
authority to complete its Young Deep Unit Well No. 1, located
in Unit D of Section 10, Township 18 South, Range 32 East,
NMPM, Lea County, New Mexico, as a dual completion (conventional)
to produce oil from the Bone Springs formation and gas from the
Gorran formation through parallel strings of tubing with sepa-
ration of the zones by means of a packer.
- (3) That the mechanics of the proposed dual completion
are feasible and in accord with good conservation practices.
- (4) That approval of the subject application will prevent
waste and protect correlative rights.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Harvey E. Yates Company, is
hereby authorized to complete its Young Deep Unit Well No. 1,

-2-

Case No. 6902
Order No. R-6363

located in Unit D of Section 10, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Bone Springs formation and gas from the Morrow formation through parallel strings of tubing with separation of the zones to be achieved by means of a packer set at approximately 12,801 feet.

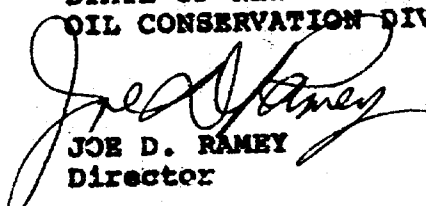
PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Division Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer leakage tests upon completion and annually thereafter during the Annual Shut-In Pressure Test Period for gas pools in Southeastern New Mexico.

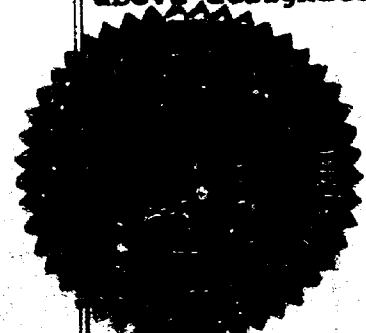
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



JOE D. RAMEY
Director



S E A L

24/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
21 May 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Harvey E. Yates Com-
pany for a dual completion, Lea
County, New Mexico.

CASE
6902

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

Robert Strand, Esq.
Roswell, New Mexico

BALLY W. HOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501
Phone (505) 455-7409

I N D E X

GEORGE M. YATES

Direct Examination by Mr. Strand 3

Cross Examination by Mr. Stamets 6

EDDIE MAHFOOD

Direct Examination by Mr. Strand 7

E X H I B I T S

Applicant Exhibit One, Plat 4

Applicant Exhibit Two, Diagram 5

Applicant Exhibit Three, Logs 5

Applicant Exhibit Four, DST 5

Applicant Exhibit Five, DST 5

SALLY W. BOYD, C.S.R.

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Phone (505) 455-7409

1 MR. STAMETS: We'll call Case 6902.

2 MR. PADILLA: Application of Harvey E.
3 Yates Company for a dual completion, Lea County, New Mexico.

4 MR. STRAND: Mr. Examiner, Robert H.
5 Strand, Attorney, from Roswell, appearing on behalf of the
6 applicant. We have two witnesses.

7 MR. STAMETS: I'd like to have them both
8 stand and be sworn, please.

9
10 (Witnesses sworn.)

11
12 GEORGE M. YATES
13 being called as a witness and having been duly sworn upon
14 his oath, testified as follows, to-wit:

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16 DIRECT EXAMINATION

17 BY MR. STRAND:

18 Q State your full name, please.

19 A George M. Yates.

20 Q Mr. Yates, what is your position with the
21 applicant, Harvey E. Yates Company?

22 A Vice President.

23 Q What are your duties as vice president?

24 A It includes the functions of overseeing
25 all exploration and land operations.

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2 the application in Case 6902?

3 A We're requesting approval of dual comple-
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5 north line and 660 feet from the west line, Section 10,
6 Township 18 South, Range 32 East, Lea County.

7 Q Mr. Yates, what zones are proposed to
8 be dual completed?

9 A We wish to dual complete the Bone Springs
10 formation, which is an oil formation, and the Morrow forma-
11 tion, which is a gas formation.

12 Q What is the completion status of the well
13 at the present time?

14 A The well is presently producing from the
15 Morrow. The Bone Springs, of course, is not being produced;
16 has not been completed.

17 Q To your knowledge are there any other
18 Morrow - Bone Springs dual completions within one mile of
19 the Young Deep Unit No. 1?

20 A There are not.

21 Q Are there any other Morrow or Bone
22 Springs wells at all within one mile?

23 A No, there are not.

24 Q Mr. Yates, referring to Exhibit Number
One, will you describe that exhibit very briefly?

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Phone (505) 435-7409

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1 A Exhibit Number One is a land plat showing
2 the Young Deep Unit, which is a Federal and State approved
3 unit, and offset operators, offset owners.

4 Q To your knowledge have all of the offset
5 owners been sent a copy of the application filed in this
6 case?

7 A Yes, hey have.

8 Q Mr. Yates, referring to Exhibit Number
9 Two, would you please identify that exhibit?

10 A Exhibit NumberTwo is a schematic diagram
11 showing the proposed dual completion.

12 Q And likewise with Exhibit Three, Four,
13 and Five.

14 A Exhibit Three is a copy of the logs sec-
15 tions covering the Bone Springs and Morrow formations, which
16 are to be dually completed if approved. The log is -- the
17 log sections that are copied are from a neutron density
18 porosity log.

19 Exhibit Four is a copy of a drill stem
20 test in the Bone Springs interval.

21 Exhibit Five is a copy of a drill stem
22 test in the Morrow producing interval, or the Morrow forma-
23 tion which is presently producing.

24 Q Mr. Yates, were Exhibits One through
Five prepared or compiled by the applicant's engineering

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1 staff either at your direction or supervision or under mine?

2 A Yes, they were.

3 Q Mr. Yates, are you familiar with the
4 requirements of Oil Conservation Division Rule Number 112-A
5 relating to multiple completions, particularly as it relates
6 to tubing leakage tests and packer leakage tests?

7 A Yes, I am.

8 Q And Harvey E. Yates Company will comply
9 with those rules if this application is granted?

10 A Yes, we will.

11 MR. STRAND: Mr. Examiner, that's all I
12 have of Mr. Yates.

13 MR. STAMETS: I presume your other wit-
14 ness will testify as to the engineering aspects of the dual
15 completion?

16 MR. STRAND: Yes. Yes. We prepared the
17 exhibits but Mr. Mahfood will testify as to the technical
18 aspects.

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20 CROSS EXAMINATION

21 BY MR. STAMETS:

22 Q Mr. Yates, is the Bone Springs a wildcat
23 zone?

24 A Yes, it is. The Bone Springs is a wildcat
25 zone. There's no production from the Bone Springs for

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1 several miles; as far as we can tell there's no production
2 from this particular interval that could be correlated and
3 said to be -- this could be a part of any present production.

4 MR. STAMETS: Any other questions of the
5 witness? He may be excused.

6 Mr. Mahfood is recognized as an expert
7 petroleum engineer from the previous case and has already
8 been sworn today and so he's considered qualified and sworn
9 at this time.

10 MR. STRAND: Thank you, Mr. Examiner.

11 EDDIE MAHFOOD

12 being called as a witness and having been previously sworn
13 upon his oath, testified as follows, to-wit:

14 DIRECT EXAMINATION

15 BY MR. STRAND:

16 Q Mr. Mahfood, would you please state your
17 full name for the record?

18 A Eddie M. Mahfood.

19 Q And what is your occupation?

20 A I'm Chief Engineer for Yates Petroleum.
21 I'm also a Registered Professional Engineer and formerly
22 a consulting engineer.

23 Q Have you been retained by Harvey E. Yates

1 Company to present testimony in Case Number 6902?

2 A Yes.

3 Q Mr. Mahfood, you heard Mr. Yates testimony.
4 Have you reviewed Exhibits One through Five prepared by the
5 applicant's staff relating to the dual completion of the
6 Young Deep No. 1 Well?

7 A Yes, I have.

8 Q Mr. Mahfood, referring first to Exhibit
9 Number Two, which is the schematic diagram of the proposed
10 completion, would you describe that in some detail?

11 A Yes. This well has 5-1/2 casing and to
12 dual complete it with separate strings it would take two
13 strings of tubing 1/16 tubing. That's what this diagram
14 is showing, two strings of 2-1/16 tubing. We have the
15 other packer above the Morrow and you've got a dual packer
16 above the Bone Springs zone.

17 Q Mr. Mahfood, does that particular
18 schematic show the perforations in the Morrow formation and
19 the proposed perforations in the Bone Springs formation?

20 A Yes, it does.

21 Q Will you please state those for the record?

22 A Okay, the Morrow perforations are 12,835
23 to 12,845 and the Bone Springs perforations are 8,410 to
24 8,480.

25 Q Mr. Mahfood, have you also examined the

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1 Exhibits Three, which is the log sections, and Four and Five,
2 which are the two drill stem tests in relationship to the
3 completion technique proposed?

4 A Yes, I have.

5 Q Is it your opinion that this proposed
6 technique represents accepted engineering practices?

7 A Yes, it is.

8 Q And is it also your opinion that based
9 on the pressures set out in those DSTs that it will prevent
10 any communication between those two zones?

11 A Yes. Yes, I think there is good appli-
12 cation there.

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14 that approval of this application will prevent the risk
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16 otherwise promote conservation, prevent waste, and protect
17 correlative rights?

18 A I do.

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23 Anything further in this case?

24 MR. STRAND: Mr. Examiner, I would move
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2 MR. STAMETS: These exhibits will be ad-
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4 If there is nothing further, the case
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7 (Hearing concluded.)
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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd C.S.R.

SALLY W. BOYD, C.S.R.

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Phone (505) 455-7409

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6902 heard by me on 5-21 1980.

Richard R. Starn, Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
21 May 1980

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C E R T I F I C A T E

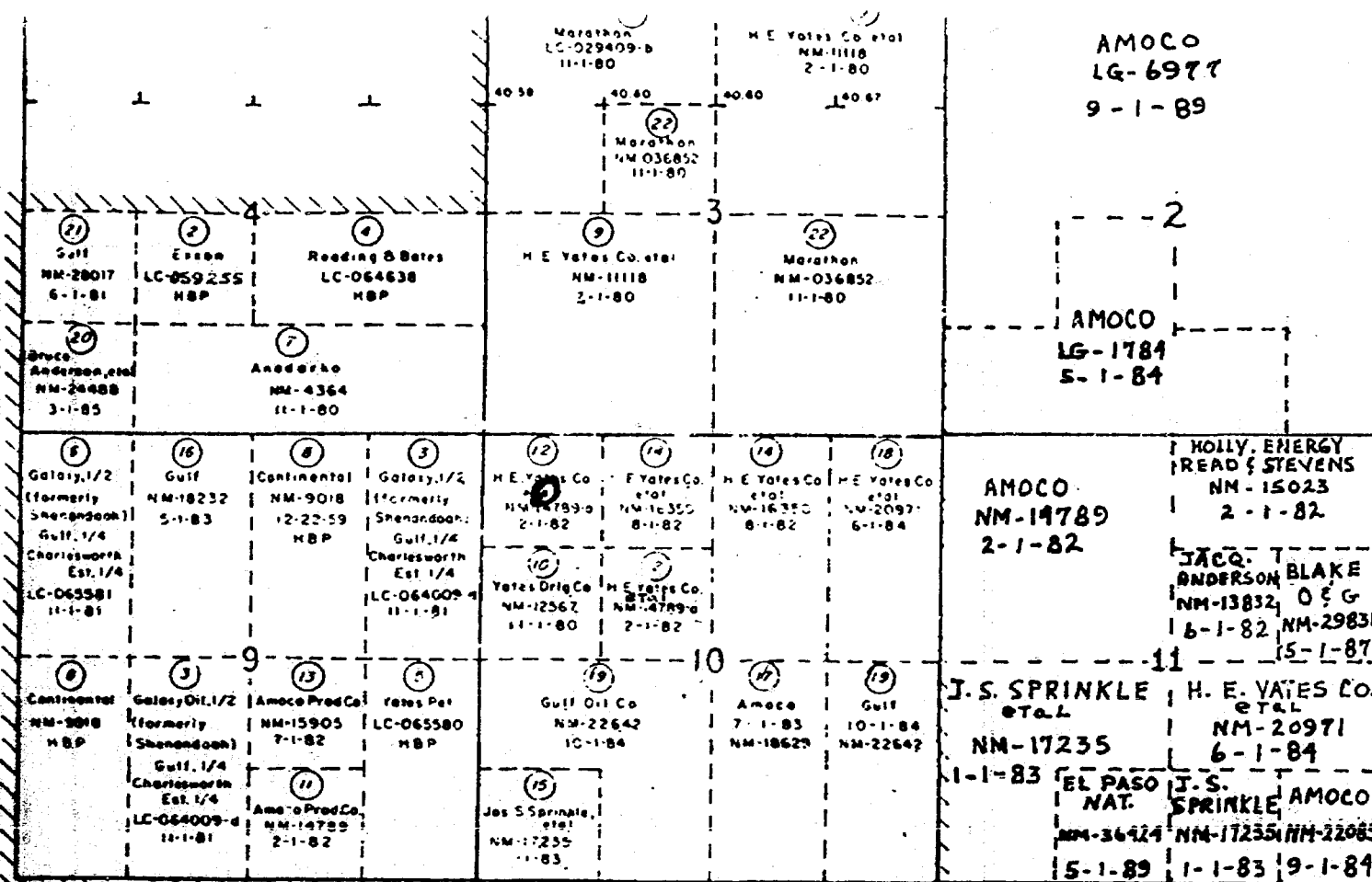
I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that
the foregoing Transcript of Hearing before the Oil Conserva-
tion Division was reported by me; that the said transcript
is a full, true, and correct record of the hearing, prepared
by me to the best of my ability.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. _____
heard by me on _____ 19____

_____, Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.

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Santa Fe, New Mexico 87501
Phone (505) 455-7409



BEFORE EXAMINER _____
 OIL CONSERVATION DIVISION
 EXHIBIT NO. _____
 CASE NO. 6902
 SUBMITTED BY Applicant
 HEARING DATE 5/21/84

Unit Outline

Tract Number

Federal Lands

2,242.45 ac., 100% of Unit Area

Scale: 1" = 2000'

YOUNG DEEP UNIT #1

PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - MORROW

PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - BONE SPRINGS

EXHIBIT "A"

YOUNG DEEP UNIT AREA
 LEA COUNTY, NEW MEXICO

APPLICATION TO DUAL COMPLETE

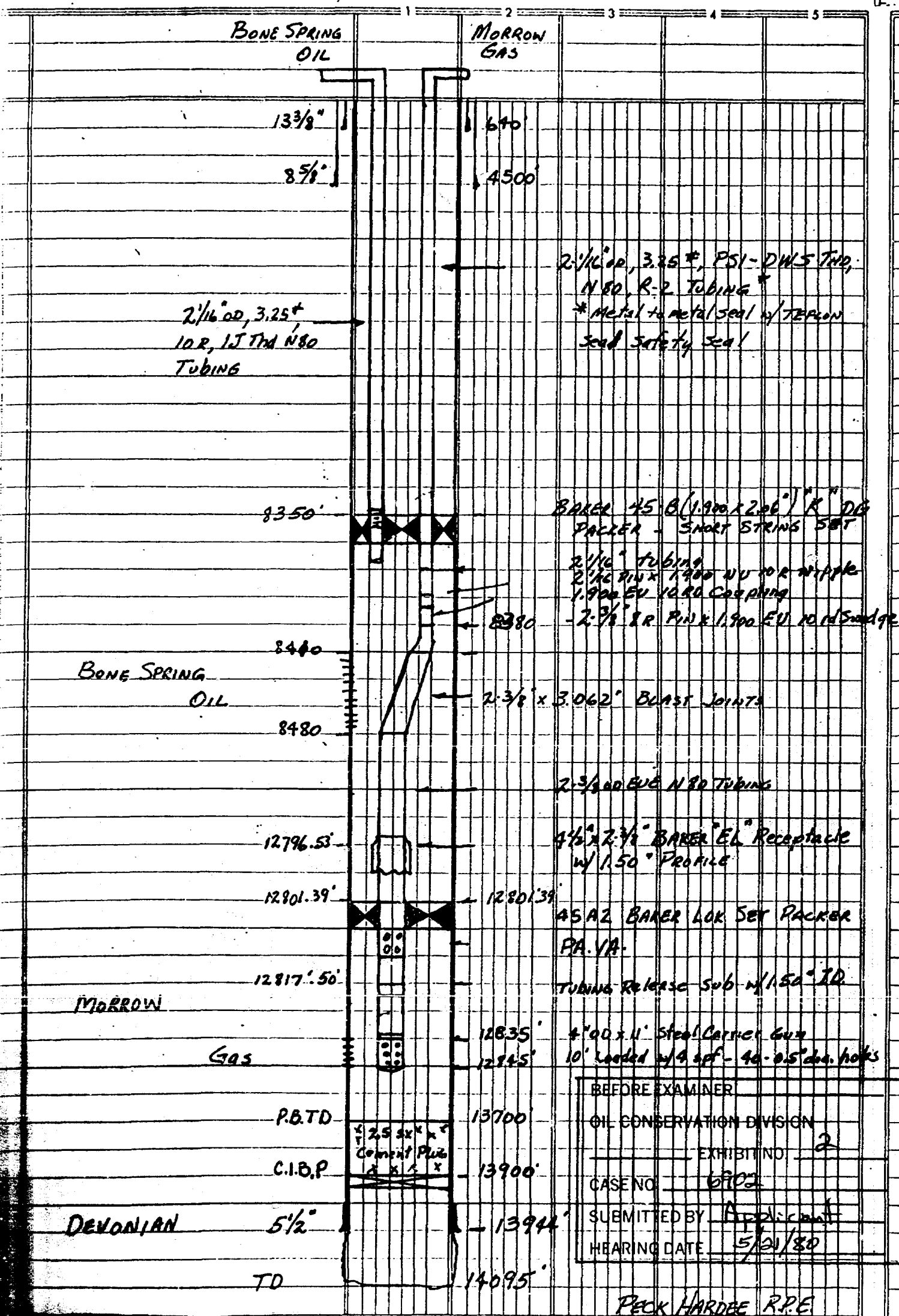
HARVEY E. YATES, CO.

YOUNG DEEP UNIT WELL No 1

SECTION 10, TWP. 18-S, RGE. 32-E, LEA CO., NEW MEXICO

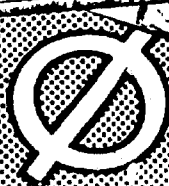
4-4 EYE CASE

Prepared By	DATE	DATE
Approved By		





Compensated **Densilog®**
Compensated **Neutron®**



LE NO.

COMPANY HARVEY E. YATES CO.

COMPANY HARVEY
WELL YOUNG DEEP UNIT #1

WELL _____
FIELD WILDCAT

FIELD WILDCAT
COUNTY LEA STATE NEW MEXICO
Other Services

LOCATION: 660' FNL & FEL

Other Services

DLL/MLL
DIALOG

SEC 10 TWP 18-S RGE 32-E
2948.8

Elevations:

KB 3863.8

SEC 10
Permanent Datum GROUND LEVEL Elev. 3848.0
KB 15 Ft. Above Permanent Datum

g Measured from _____
 lling Measured from _____

4 / 1 / 80

in No.	002
	14656

Price Order	13940
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pth—Driller

pth—Logger	
Interval	1.390-1

Item Logged Interval	4450
Interval	

Driller 85/6@4

sing - Oriller	449
log - Logger	31

Size	7 1/2
------	-------

Size	
Fluid in Hole	BRINE

Density and Viscosity	9.6	
	9.5	

pH and Fluid Loss	9.3	10.5
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Source of Sample	140@
------------------	------

Rm @ Meas. Temp.	190
	190 @

Rml @ Meas. Temp.	.100
Temp	— @

Rmc @ Meas. Temp.	
2.121 Rmc	M

Source of Rmi and Rme	065 @
-----------------------	-------

Rm @ BHT 8 HQ

me Since Circ.	
Gas Temp. Deg. F.	17

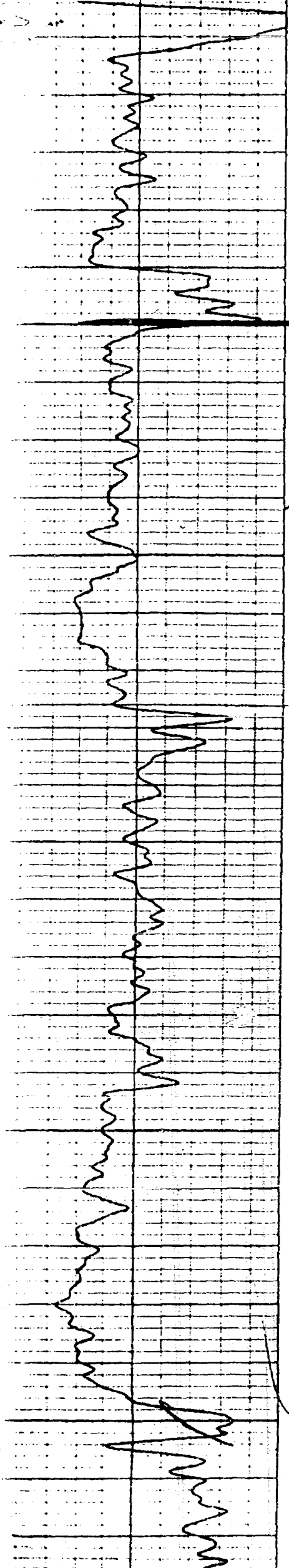
3x. Rec. Temp. 55°	
No. and Location	6136

Equipment No. and Location: _____
Recorded By: _____ **FLA**

Recorded By _____
Classified By _____

BEFORE EXAMINER _____
OIL CONSERVATION DIVISION
EXHIBIT NO. 3
CASE NO. 6902
SUBMITTED BY Applicant
HEARING DATE 5/24/80

TOPS[®] and Analysis on S¹¹



08400

B.5P 0401

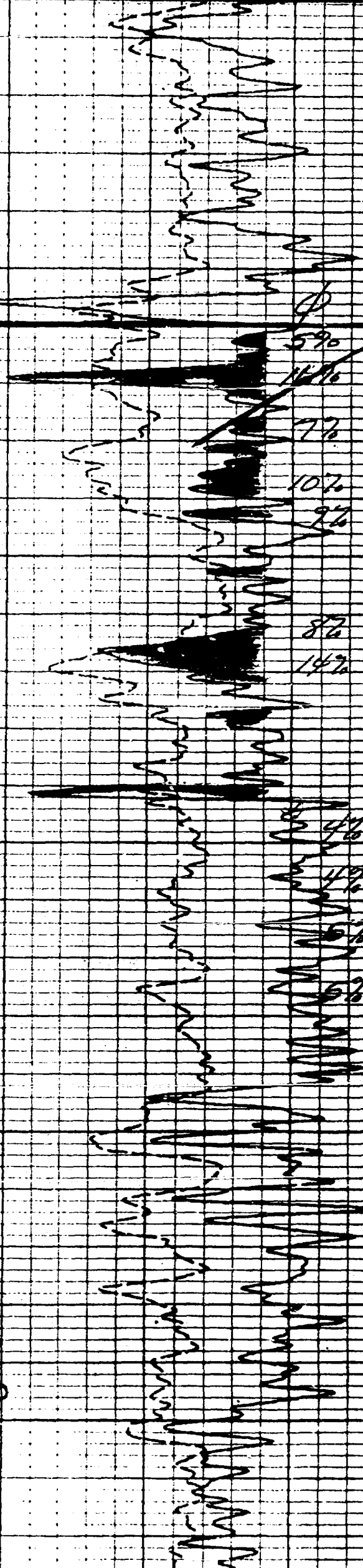
DST#2

R/4428
FO

08500

08600

Abo 8600



54%

59% 16%

14% 6%

7% 26%

10% 11%

9% 16%

8% 10%

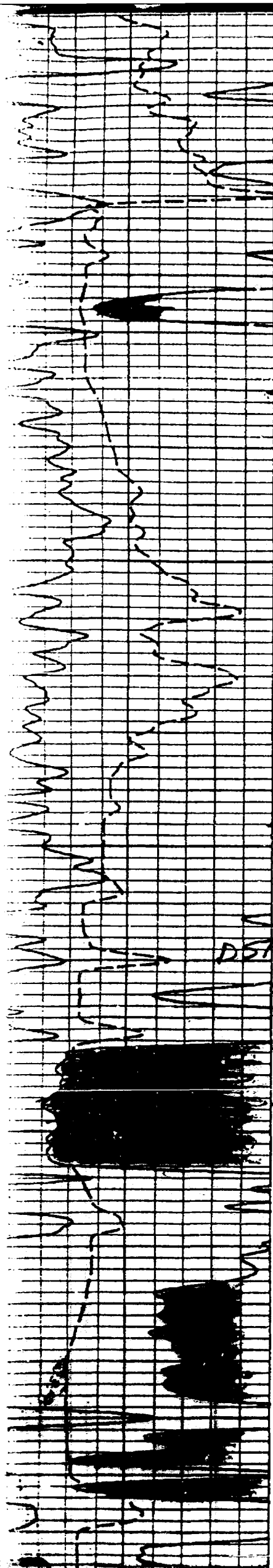
14% 11%

4% 23%

4% 23%

5% 27%

6% 28%

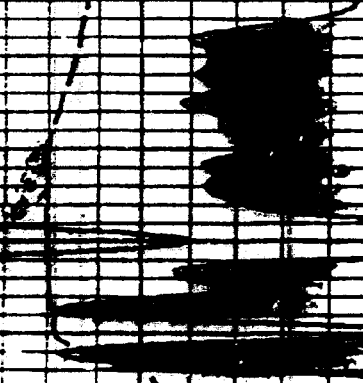


12700

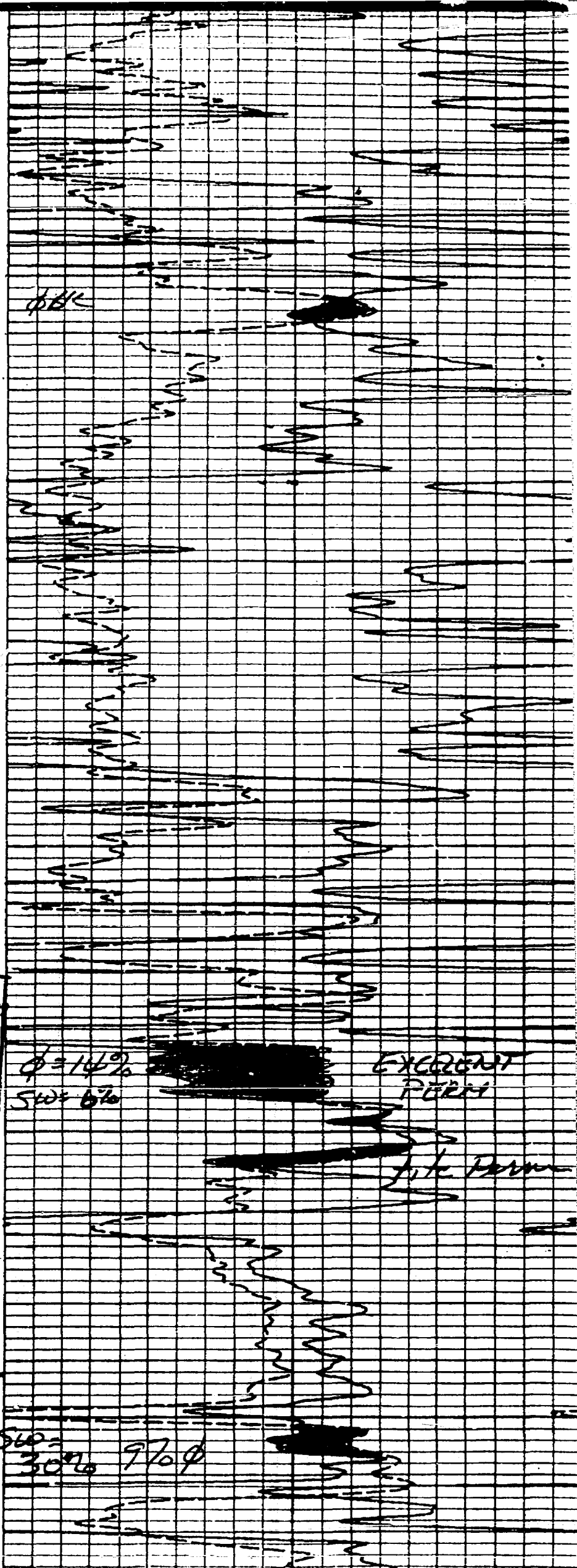
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DST #5

GTSQ
13.6MM



12900



φBK

$\phi = 14\%$
SW = 6%

EXCELLENT
PERM

Like Perm

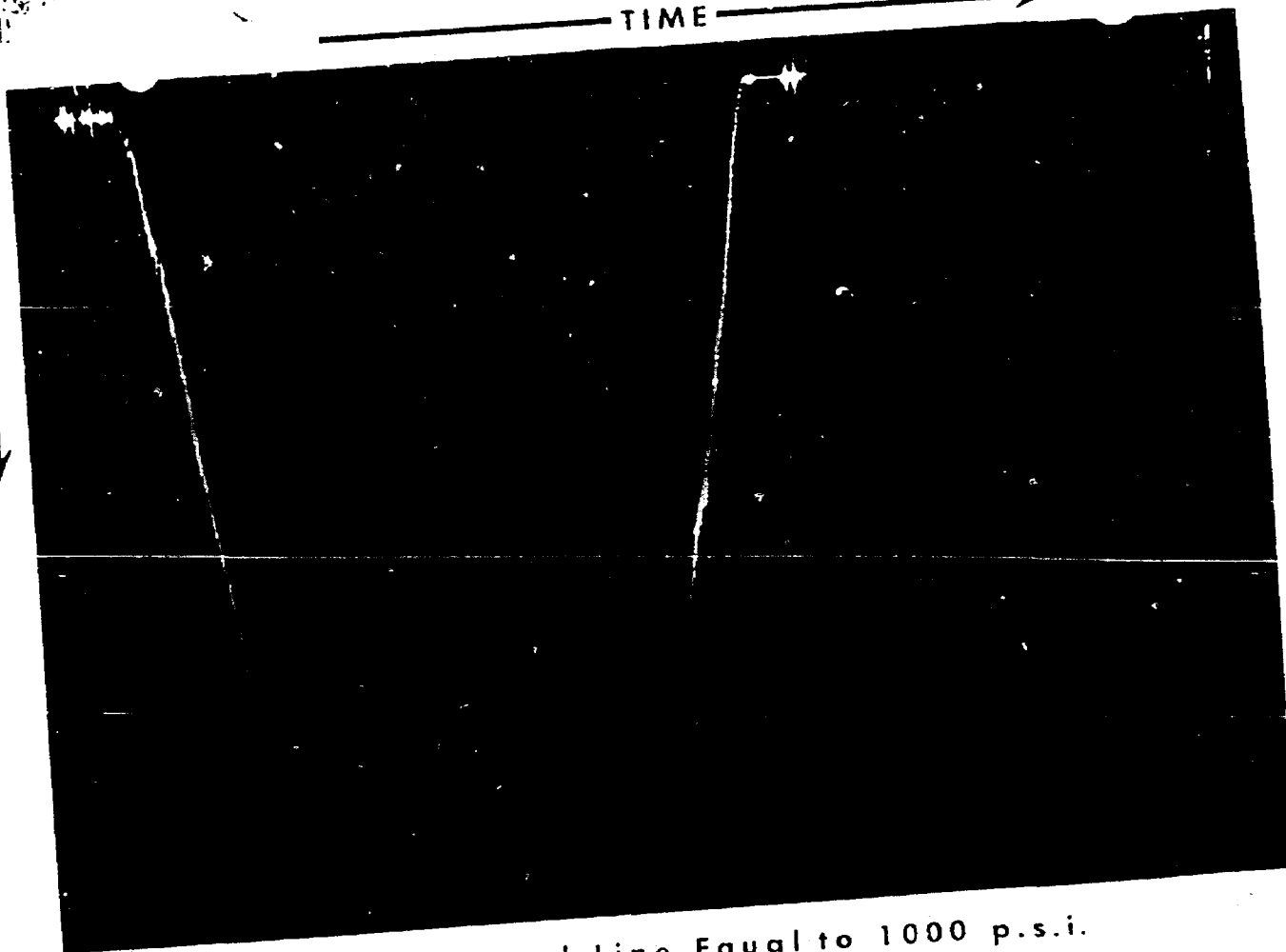
SW = 30% 7%φ

DESIGNATION	SEA
OIL CONSERVATION	4
WELL NO.	6902
SUBMITTED BY	Applicant
RECEIVING DATE	5/21/80

713720-1113

PRESSURE

TIME



Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA				Date 2-20-80		Ticket Number 713720	
Sampler Pressure		900 P.S.I.G. at Surface		Kind of D.S.T.		OPEN HOLE	
Recovery: Cu. Ft. Gas		18.33		Tester		B. BYRD	
cc. Oil		850		Witness		DOYLE PROCTOR	
cc. Water		0		Drilling Contractor		MORANCO # 7	
cc. Mud		0		DR			
Tot. Liquid cc.		850		EQUIPMENT & HOLE DATA			
Gravity		37.6 ° API @ 60 ° F.		Formation Tested		Middle Bone Springs	
Gas/Oil Ratio		3422.97 cu. ft./bbl.		Elevation		3845.8' GL	
RESISTIVITY		CHLORIDE CONTENT		Net Productive Interval		36'	
Recovery Water		@ ° F. ppm		All Depths Measured From		Kelly Bushing (AGL) 3863.8'	
Recovery Mud		@ ° F. ppm		Total Depth		8480'	
Recovery Mud Filtrate		@ ° F. ppm		Main Hole/Casing Size		7 7/8"	
Mud Pit Sample		@ ° F. ppm		Drill Collar Length		473' I.D. 2.00"	
Mud Pit Sample Filtrate		@ ° F. ppm		Drill Pipe Length		7912' I.D. 3.826-3.640"	
Mud Weight		8.4 vis sec.		Packer Depth(s)		8414-8419'	
				Depth Tester Valve		8397'	
TYPE		AMOUNT		Depth Back		Surface	
Cushion				Ft. Pres. Valve		Floor manifold	
						Bottom Choke .75"	
Recovered		4428 Feet of free oil					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks		See production test data sheet					
TEMPERATURE		Gauge No. 1113		Gauge No. 1114		Gauge No.	
		Depth: 8399 Ft.		Depth: 8476 Ft.		Depth: Ft.	
		24 Hour Clock		24 Hour Clock		Hour Clock	
Est. 122 ° F.		Blanked Off NO		Blanked Off YES		Blanked Off	
Actual ° F.		Pressures		Pressures		Pressures	
		Field Office		Field Office		Field Office	
Initial Hydrostatic		3722 3731.0		3772 3756.3			
Flow Initial		145 194.9		158 166.1			
Flow Final		504 501.8		506 522.0			
Closed in		3397 3402.5		3424 3425.6			
Flow Initial		504 526.8		538 558.1			
Flow Final		1007 1019.7		1041 1036.1			
Closed in		3379 3400.7		3408 3428.8			
Flow Initial							
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Casing perfs. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 713720
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
0910		BH				Tools on bottom
0913		"	1/2#			Opened tool with a fair blow
0923		"	3 1/2#			Strong blow
0928		3/8"	8#			Opened to 3/8" choke
0933		"	14#			"
0942		"	29#			"
0943		"				Closed tool
0950						Gas to surface
1043		BH	1#			Opened tool with a good blow
1058		"	4#			Strong blow
1059		"				Opened to 3/8" choke with gas to
		3/8"				surface
1113		"	16#			Gas to surface
1128		"	21#			"
1143		"	22#			"
1158		"	29#			"
1203		"	24#			Pressure started dropping
1208		"	21#			"
1213		"	20#			Closed tool
1513						Pulled tool loose

Gauge No. 1113			Depth 8399'			Clock No. 6728			24 hour		Ticket No. 713720					
First Flow Period			First Closed In Pressure			Second Flow Period			Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	
0	.000	194.9	.000		501.8	.000	526.8	.000		1019.7						
1	.017	268.9	.0099		3074.0	.0099**	607.5	.0099		3319.5						
2	.034	303.2	.0199		3364.6	.1068	693.5	.0198		3377.2						
3	.051	364.6	.0299		3382.6	.1554	779.5	.0296		3386.2						
4	.068	411.5	.0399		3389.9	.2039	860.2	.0395		3391.7						
5	.085	462.1	.0499		3393.5	.2525	956.9	.0494		3393.5						
6	.102	501.8	.0598		3395.3	.3010	1019.7	.0593		3395.3						
7			.0698		3397.1			.0691		3397.1						
8			.0798		3398.9			.0790		3398.9						
9			.0897		3400.7			.0889		3400.7						
10			.0997		3402.5			.0988		3400.7						
11			.1229		3402.5			.2206		3400.7						
12			.1462		3402.5			.3424		3400.7						
13			.1695		3402.5			.4642		3400.7						
14			.1927		3402.5			.5860		3400.7						
15			.1960		3402.5											

Gauge No. 1114			Depth 8476'			Clock No. 5979			hour 24	
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.
0	.000	166.1	.000		522.0	.000	558.1	.000		1036.1
1	.0167	294.3	.0099		3362.3	.0590**	613.2	.0099		3384.4
2	.0333	337.0	.0198		3393.9	.1082	701.2	.0197		3400.3
3	.0500	384.4	.0298		3405.0	.1574	787.7	.0296		3408.2
4	.0667	430.3	.0397		3409.8	.2066	872.6	.0394		3414.5
5	.0834	482.6	.0496		3414.5	.2558	963.8	.0493		3417.7
6	.1000	522.0	.0595		3417.7	.3050	1036.1	.0592		3419.3
7			.0694		3419.3			.0690		3420.8
8			.0794		3420.8			.0789		3422.4
9			.0893		3422.4			.0887		3424.0
10			.0992		3424.0			.0986		3425.6
11			.1223		3425.6			.2202		3427.2
12			.1455		3425.6			.3418		3428.8
13			.1686		3425.6			.4634		3428.8
14			.1918		3425.6			.5850		3428.8
15			.1950		3425.6					

Reading Interval 5 * 15 *** Minutes

REMARKS: *-First 10 intervals equal to 3 minutes each; next 4 intervals equal to 7 minutes each; last interval equal to 1 minute. **-.18 minutes ***-First 10 intervals equal to 3 minutes each; last 4 intervals equal to 37 minutes each.

SPECIAL PRESSURE DATA

TICKET NO. 713720

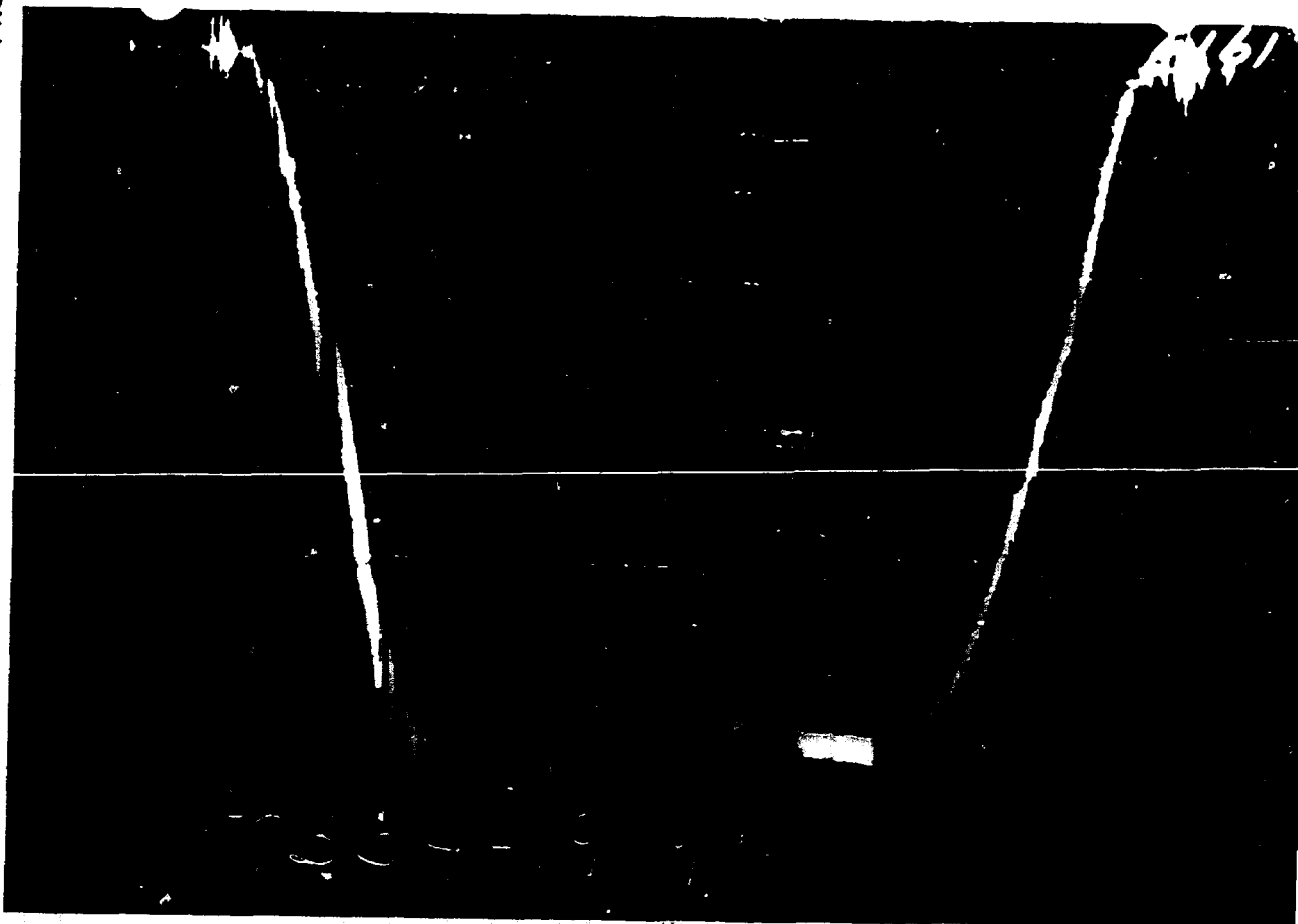
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	6.00"	3.00"	1.00'	8324.13'
Water Cushion Valve				
Drill Pipe	4.50"	3.640-3.826"	7912.13'	
Drill Collars	6.25"	2.00"	473'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler	5.00"	.75"	6.75'	8391.88'
Hydro-Spring Tester	5.00"	.75"	5.00'	8396.88'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5.00"	3.06"	4.14'	8398.76'
Hydraulic Jar	5.03"	1.00"	5.00'	
VR Safety Joint	5.00"	1.00"	2.78'	
Pressure Equalizing Crossover				
Packer Assembly	5.06"	1.53"	5.81'	8413.60'
Distributor				
Packer Assembly	5.06"	1.53"	5.81'	8419.41'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5.75"	1.50"	4.20'	
Packer Assembly	5.75"	2.62'	1.00' X over	
Distributor	6.25"	2.00"	28.89' Drill collar	
Packer Assembly	5.50"	2.25"	1.00' X over	
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5.75"	2.87"	20.00'	
Blanked-Off B.T. Running Case	5.75"	2.50"	4.00'	8476'
Total Depth				8480'

05.61

757334-1920

PRESSURE

TIME



Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA				Date	Ticket Number																																																																																																																																																	
Sampler Pressure <u>50 ?</u> P.S.I.G. at Surface Recovery: Cu. Ft. Gas <u>3.10</u> cc. Oil <u>0</u> cc. Water <u>0</u> cc. Mud <u>0</u> Tot. Liquid cc. <u>0</u> Gravity <u> </u> * API @ <u> </u> *F. Gas/Oil Ratio <u> </u> cu. ft./bbl. RESISTIVITY CHLORIDE CONTENT Recovery Water <u> </u> @ <u> </u> *F. <u> </u> ppm Recovery Mud <u> </u> @ <u> </u> *F. <u> </u> ppm Recovery Mud Filtrate <u> </u> @ <u> </u> *F. <u> </u> ppm Mud Pit Sample <u> </u> @ <u> </u> *F. <u> </u> ppm Mud Pit Sample Filtrate <u> </u> @ <u> </u> *F. <u> </u> ppm Mud Weight <u>9.7</u> vis <u> </u> sec.				Date <u>3-17-80</u> Kind of D.S.T. <u>OPEN HOLE</u> Tester <u>MR. DAVIS</u> Drilling Contractor <u>MORANCO DRILLING COMPANY #7</u>	Ticket Number <u>757334</u> Halliburton Location <u>ARTESIA</u> Witness <u>MR. HUBER</u> <u>bc</u>																																																																																																																																																	
EQUIPMENT & HOLE DATA																																																																																																																																																						
Formation Tested <u>Morrow -- Bottom</u> Elevation <u>3845'</u> GL <u> </u> Ft. Net Productive Interval <u>22'</u> Ft. All Depths Measured From <u>Kelly Bushing (AGL) 3863.8'</u> Total Depth <u>12900'</u> Ft. Main Hole/Casing Size <u>7 7/8"</u> Drill Collar Length <u>450'</u> I.D. <u>2"</u> Drill Pipe Length <u>12350'</u> I.D. <u>3.826"</u> Packer Depth(s) <u>12817' - 12823'</u> Ft. Depth Tester Valve <u>12805'</u> Ft.																																																																																																																																																						
TYPE		AMOUNT	Depth Back	Surface	FLOOR	Bottom																																																																																																																																																
Cushion			Ft. Pres. Valve	Choke	Manifold	Choke																																																																																																																																																
Recovered		<u>2800</u>	Feet of	<u>Gas cut drilling fluid</u>																																																																																																																																																		
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Remarks <u>SEE PRODUCTION TEST DATA SHEET.</u>																																																																																																																																																						
Standard clock factor used to obtain times.																																																																																																																																																						
<table border="1"> <thead> <tr> <th rowspan="2">TEMPERATURE</th> <th colspan="2">Gauge No. 1920</th> <th colspan="2">Gauge No. 1919</th> <th colspan="2">Gauge No. 1918</th> <th rowspan="2">TIME (00:00-24:00 hrs.)</th> </tr> <tr> <th>Depth:</th> <th></th> <th>Depth:</th> <th></th> <th>Depth:</th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td><u>12809'</u></td> <td><u> </u> Ft.</td> <td><u>12895'</u></td> <td><u> </u> Ft.</td> <td><u> </u></td> <td><u> </u> Ft.</td> <td></td> </tr> <tr> <td>Est.</td> <td><u>24</u> Hour Clock</td> <td><u> </u></td> <td><u>24</u> Hour Clock</td> <td><u> </u></td> <td><u> </u> Hour Clock</td> <td><u> </u></td> <td>Tool</td> </tr> <tr> <td></td> <td>Blanked Off <u>No</u></td> <td></td> <td>Blanked Off <u>Yes</u></td> <td></td> <td>Blanked Off</td> <td></td> <td>Opened <u>0230</u></td> </tr> <tr> <td>Actual <u>171</u> *F.</td> <td colspan="2">Pressures</td> <td colspan="2">Pressures</td> <td colspan="2">Pressures</td> <td>Opened <u>0630</u></td> </tr> <tr> <td></td> <td>Field</td> <td>Office</td> <td>Field</td> <td>Office</td> <td>Field</td> <td>Office</td> <td>Bypass</td> </tr> <tr> <td>Initial Hydrostatic</td> <td><u>6350</u></td> <td><u>6363.4</u></td> <td><u>6351</u></td> <td><u>6377.7</u></td> <td></td> <td></td> <td>Reported</td> </tr> <tr> <td rowspan="3">First Period</td> <td>Initial</td> <td><u>4808</u></td> <td><u>4726.0</u></td> <td><u>5214</u></td> <td><u>5158.4</u></td> <td></td> <td>Minutes</td> </tr> <tr> <td>Flow</td> <td><u>4854</u></td> <td><u>5634.9</u></td> <td><u>5237</u></td> <td><u>5837.0</u></td> <td></td> <td></td> </tr> <tr> <td>Closed in</td> <td><u>6057</u></td> <td><u>6072.2</u></td> <td><u>6087</u></td> <td><u>6091.1</u></td> <td></td> <td></td> </tr> <tr> <td rowspan="3">Second Period</td> <td>Initial</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Flow</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Closed in</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="3">Third Period</td> <td>Initial</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Flow</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Closed in</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Final Hydrostatic</td> <td><u>6305</u></td> <td><u>6367.9</u></td> <td><u>6329</u></td> <td><u>6402.2</u></td> <td></td> <td></td> <td>Computed</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Minutes</td> </tr> </tbody> </table>							TEMPERATURE	Gauge No. 1920		Gauge No. 1919		Gauge No. 1918		TIME (00:00-24:00 hrs.)	Depth:		Depth:		Depth:			<u>12809'</u>	<u> </u> Ft.	<u>12895'</u>	<u> </u> Ft.	<u> </u>	<u> </u> Ft.		Est.	<u>24</u> Hour Clock	<u> </u>	<u>24</u> Hour Clock	<u> </u>	<u> </u> Hour Clock	<u> </u>	Tool		Blanked Off <u>No</u>		Blanked Off <u>Yes</u>		Blanked Off		Opened <u>0230</u>	Actual <u>171</u> *F.	Pressures		Pressures		Pressures		Opened <u>0630</u>		Field	Office	Field	Office	Field	Office	Bypass	Initial Hydrostatic	<u>6350</u>	<u>6363.4</u>	<u>6351</u>	<u>6377.7</u>			Reported	First Period	Initial	<u>4808</u>	<u>4726.0</u>	<u>5214</u>	<u>5158.4</u>		Minutes	Flow	<u>4854</u>	<u>5634.9</u>	<u>5237</u>	<u>5837.0</u>			Closed in	<u>6057</u>	<u>6072.2</u>	<u>6087</u>	<u>6091.1</u>			Second Period	Initial							Flow							Closed in							Third Period	Initial							Flow							Closed in							Final Hydrostatic	<u>6305</u>	<u>6367.9</u>	<u>6329</u>	<u>6402.2</u>			Computed								Minutes
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Legal Location 10 - 18 - 32
 Lease Name YOUNG DEEP UNIT
 Well No. 1
 Test No. 5
 Tested Interval 12823' - 12900'
 County LEA
 State NEW MEXICO
 Lease Owner/Company Name HARVEY C. YATES COMPANY

Gauge No. 1920			Depth 12603'			Clock No. 16710			24 hour		Ticket No. 757334						
First Flow Period			First Closed In Pressure			Second Flow Period			Second Closed In Pressure			Third Flow Period			Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.		
0	.0000	4726.0	.0000		5634.9												
1	.0034	4767.1	.0095		6060.9												
2	.0068	4796.8	.0190		6063.2												
3	.0102	4865.2	.0285		6063.2												
4	.0135	4897.2	.0379		6065.4												
5	.0169	4933.7	.0474		6065.4												
6	.0203	4995.4	.0569		6065.4												
7	.0237	5081.6	.0664		6065.4												
8	.0271	5188.2	.0759		6067.7												
9	.0305	5274.3	.0854		6067.7												
10	.0338	5367.3	.0949		6069.9												
11	.0372	5492.0	.2273		6069.9												
12	.0406	5609.9	.3478		6072.2												
13	.0440	5634.9	.4743		6072.2												
14			.6008		6072.2												
15			.7810		6072.2												

Gauge No. 1919			Depth 12895'			Clock No. 13528			24 hour							
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t+\theta}{\theta}$	PSIG Temp. Corr.	
0	.0000	5158.4	.0000		5837.0											
1	.0035	5187.4	.0100		6075.5											
2	.0069	5225.4	.0200		6079.9											
3	.0104	5258.9	.0300		6082.2											
4	.0138	5281.2	.0399		6084.4											
5	.0173	5310.2	.0499		6086.6											
6	.0208	5341.5	.0599		6086.6											
7	.0242	5392.8	.0699		6086.6											
8	.0277	5437.4	.0799		6086.6											
9	.0312	5506.6	.0899		6086.6											
10	.0345	5569.1	.0999		6086.6											
11	.0381	5624.9	.2330		6088.8											
12	.0415	5707.5	.3661		6091.1											
13	.0450	5837.0	.4992		6091.1											
14			.6323		6091.1											
15			.8220		6091.1											

Reading Interval 1 Minutes

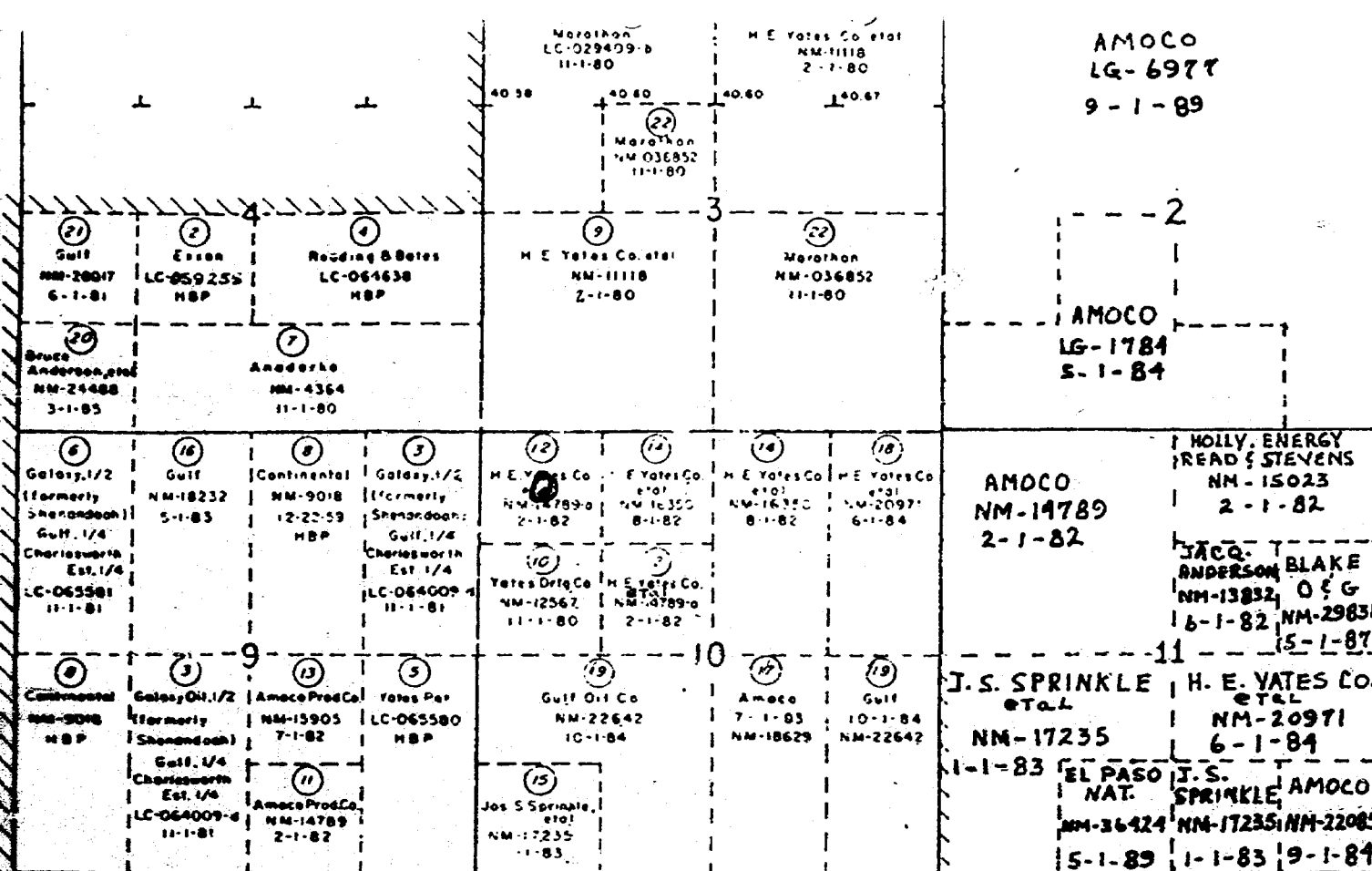
REMARKS: *First 10 intervals = 3 minutes each; next 4 intervals = 40 minutes each; last interval = 57 minutes

TICKET NO. 757334

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	12350'	
Drill Collars	6.25"	2.25"	450'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	7'	12800'
Dual CIP Sampler	5"	.75"	5'	12805'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3"	4'	12809'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	6'	12817'
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	12823'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars	6 1/4"	2.25"	28.89'	
Flush Joint Anchor	5 3/4"	2.87"	38.38'	
Blanked-Off B.T. Running Case	5 3/4"	-	5'	12895'
Total Depth				12900'

EQUIPMENT DATA

LITTLE'S WORK PROGRESS



BEFORE EXAMINER _____

OIL CONSERVATION DIVISION

EXHIBIT NO. 1

CASE NO. 6902

SUBMITTED BY Applicant

HEARING DATE 5/21/80

R - 32 - E

Unit Outline

Tract Number

Federal Lands

2,342.45 ac., 100% of Unit Area

Scale: 1" = 2000'

YOUNG DEEP UNIT #1

PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - MORROW

PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - BONE SPRINGS

EXHIBIT "A"

YOUNG DEEP UNIT AREA
LEA COUNTY, NEW MEXICO

Marathon LC-028409-8 11-1-80	H E Yates Co et al NM-11118 2-1-80	AMOCO LG-6977 9-1-89
40.40 Marathon NM-036852 11-1-80	40.60 Marathon NM-036852 11-1-80	2
E Yates Co et al NM-11118 2-1-80	Marathon NM-036852 11-1-80	AMOCO LG-1784 5-1-84
14 E Yates Co et al NM-16350 8-1-82	14 H E Yates Co et al NM-16350 8-1-82	AMOCO NM-14789 2-1-82
14 H E Yates Co et al NM-16350 8-1-82	14 H E Yates Co et al NM-16350 8-1-82	HOLLY ENERGY READ STEVENS NM-15023 2-1-82
14 H E Yates Co et al NM-16350 8-1-82	14 H E Yates Co et al NM-16350 8-1-82	JACQ. T. BLAKE ANDERSON NM-13832 5-1-82
14 H E Yates Co et al NM-16350 8-1-82	14 H E Yates Co et al NM-16350 8-1-82	J. S. SPRINKLE ET AL NM-17235 1-1-83

T
18
S

BEFORE EXAMINER	_____
OIL CONSERVATION DIVISION	_____
EXHIBIT NO.	1
CASE NO.	6902
SUBMITTED BY	Applicant
HEARING DATE	5/21/80

YOUNG DEEP UNIT #1

PRODUCTION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - MORROW

PRODUCTION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - BONE SPRINGS

EXHIBIT "A"

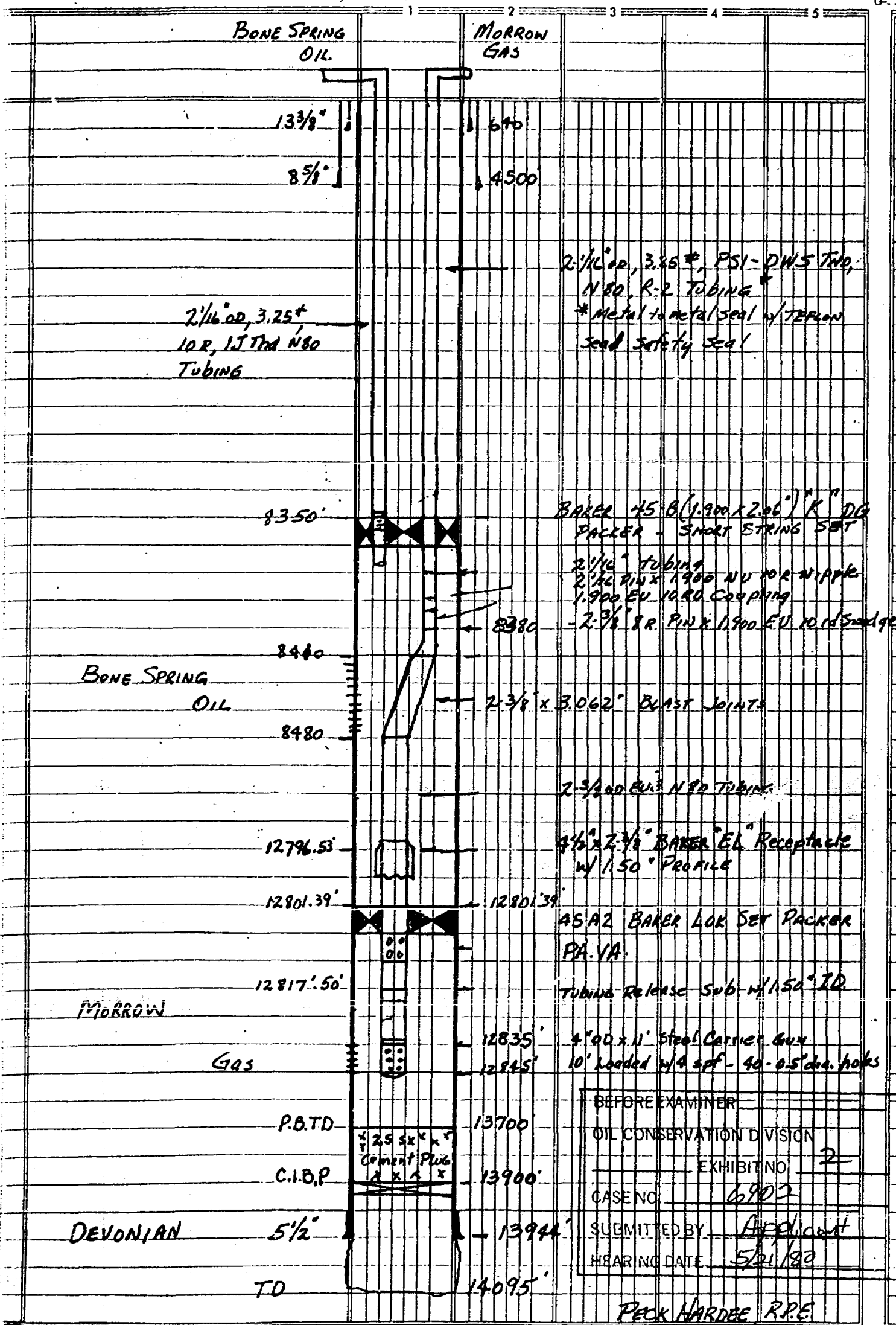
YOUNG DEEP UNIT AREA
COUNTY, NEW MEXICO

APPLICATION TO DUAL COMPLETE

HARVEY E. YATES, CO.

YOUNG DEEP UNIT WELL No. 1

SECTION 10, TWP. 18-S, RGE. 32-E, LEA CO., NEW MEXICO

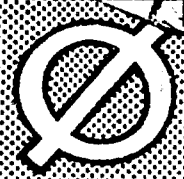


reese Atlas

Combination Logging Systems

DRESSER

Compensated **Densilog®**
Compensated **Neutron®**



ENO.

COMPANY HARVEY E. YATES CO.

WELL YOUNG DEEP UNIT #1

FIELD WILDCAT

COUNTY LEA STATE NEW MEXICO

LOCATION: 660' ENL & FEL

Other Services

DLL/MLL
DIPLOG

SEC 10 TWP 18-S RGE 32-E

Permanent Datum GROUND LEVEL Elev. 3848.8

Elevations:

KB 3863.8

g Measured from KB 15 Ft. Above Permanent Datum

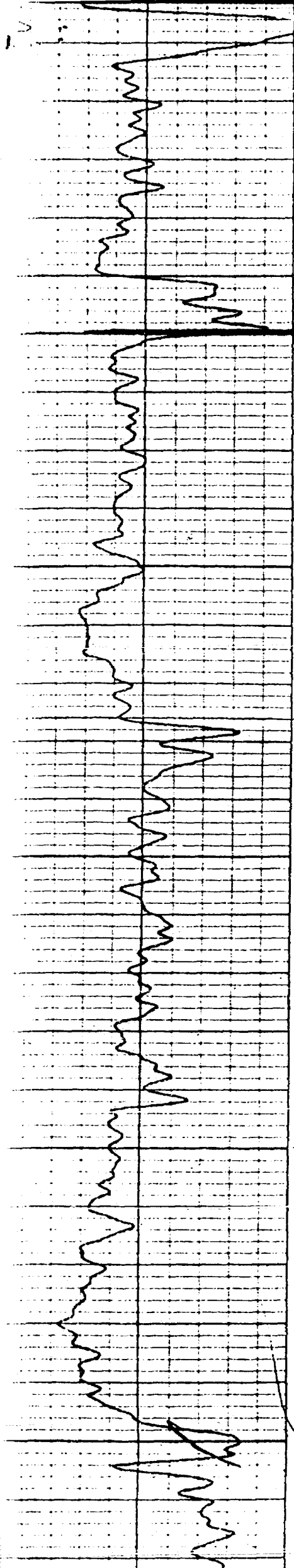
DF

ing Measured from KB

GL 3848.8

4/1/80					
On No.	ONE				
Price Order	14656				
Depth—Driller	13940				
Depth—Logger	13960				
Bottom Logged Interval	13958				
Top Logged Interval	4450				
Logging—Driller	85/6 @ 4500	@		@	
Logging—Logger	4493				
Size	7 7/8				
Fluid in Hole	BRINE FOL - KCL				
Density and Viscosity	9.6 38				
pH and Fluid Loss	9.5 5 cc				
Source of Sample	PIT	T/BSP	6245'		
Time @ Meas. Temp	.140 @ 76 °F	2nd BHT	9925 °F	@	°F
Rml @ Meas. Temp.	.100 @ 76 °F	9/100	8600 °F	@	°F
Rmc @ Meas. Temp.	— @ — °F	2nd BHT	8650 °F	@	°F
Source of Rml and Rmc	M —	3rd BHT	8525 °F		
Rm @ BHT	.065 @ 170 °F	9/100	9484 °F	@	°F
Time Since Circ.	8 HOURS	T/SR	11600		
Max. Rec. Temp. Deg. F.	170 °F	T/NO	12230 °F		°F
Equip. No. and Location	6136 H0685	T/MIS	13276		
Recorded By	FRANKLIN	T/NO	13860		
Checked By	SMITH	T/DEL	13976'		

BEFORE EXAMINER
OIL CONSERVATION DIVISION
EXHIBIT NO. 3
CASE NO. 6902
SUBMITTED BY Applicant
RECEIVED DATE 5/21/80



084000
B.SP ϕ & NL

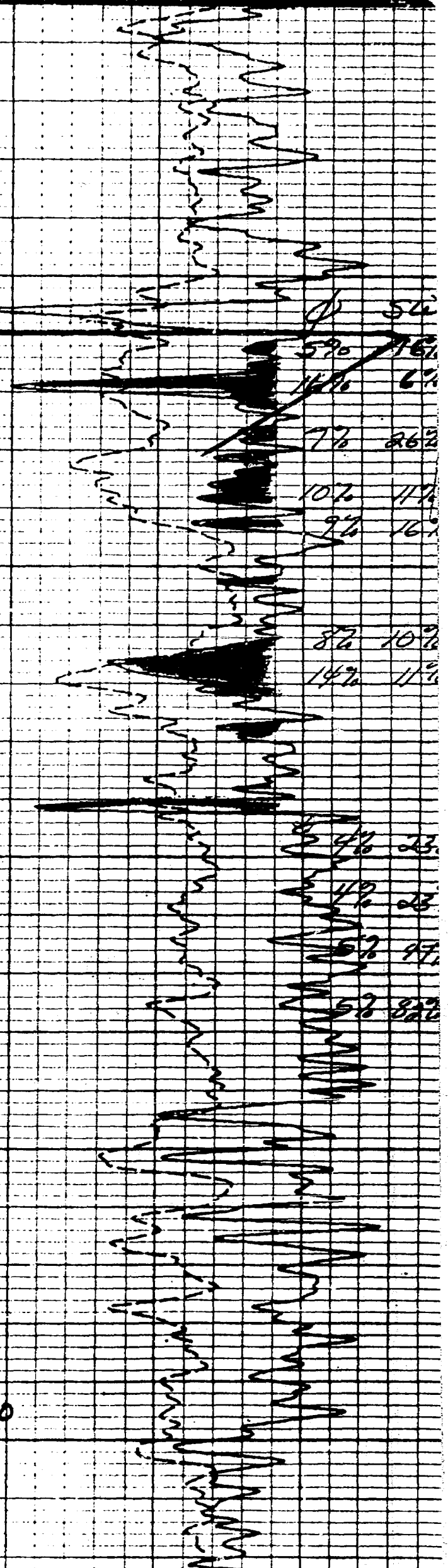
DST #2

P/4428
FO

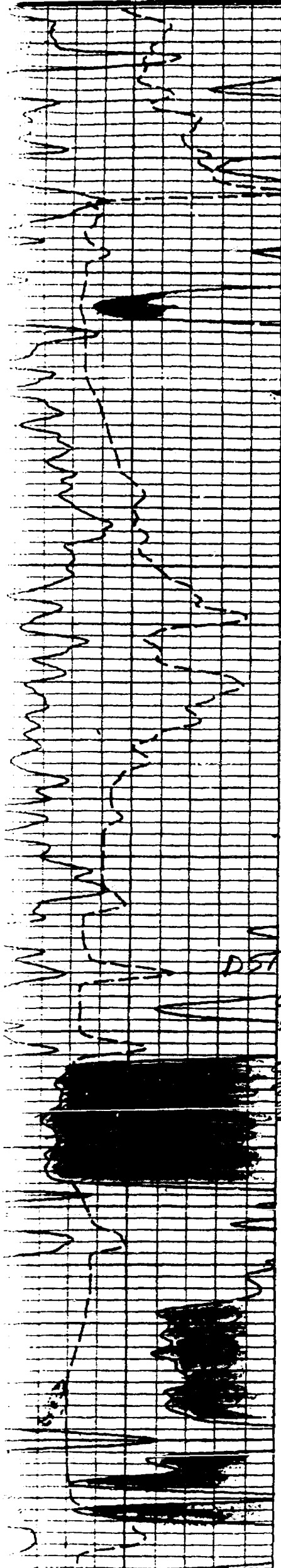
08500

08600

Abg 8600



ϕ	56%
59%	16%
16%	6%
7%	26%
10%	11%
9%	16%
8%	10%
14%	11%
4%	23%
1%	23%
5%	47%
5%	82%

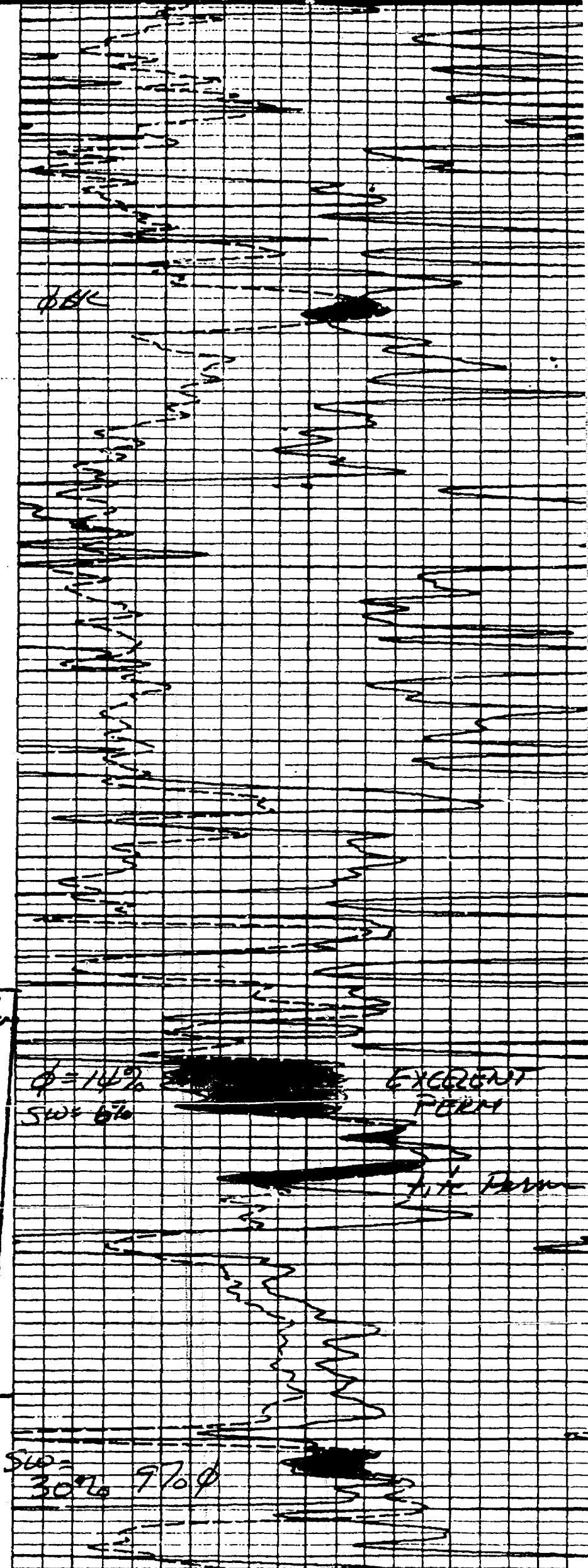


12700

12800

DST #5
GTSQ
13.6MM

12900



$\phi = 14\%$
SW 6%

EXCERENT
FORM

Life Form

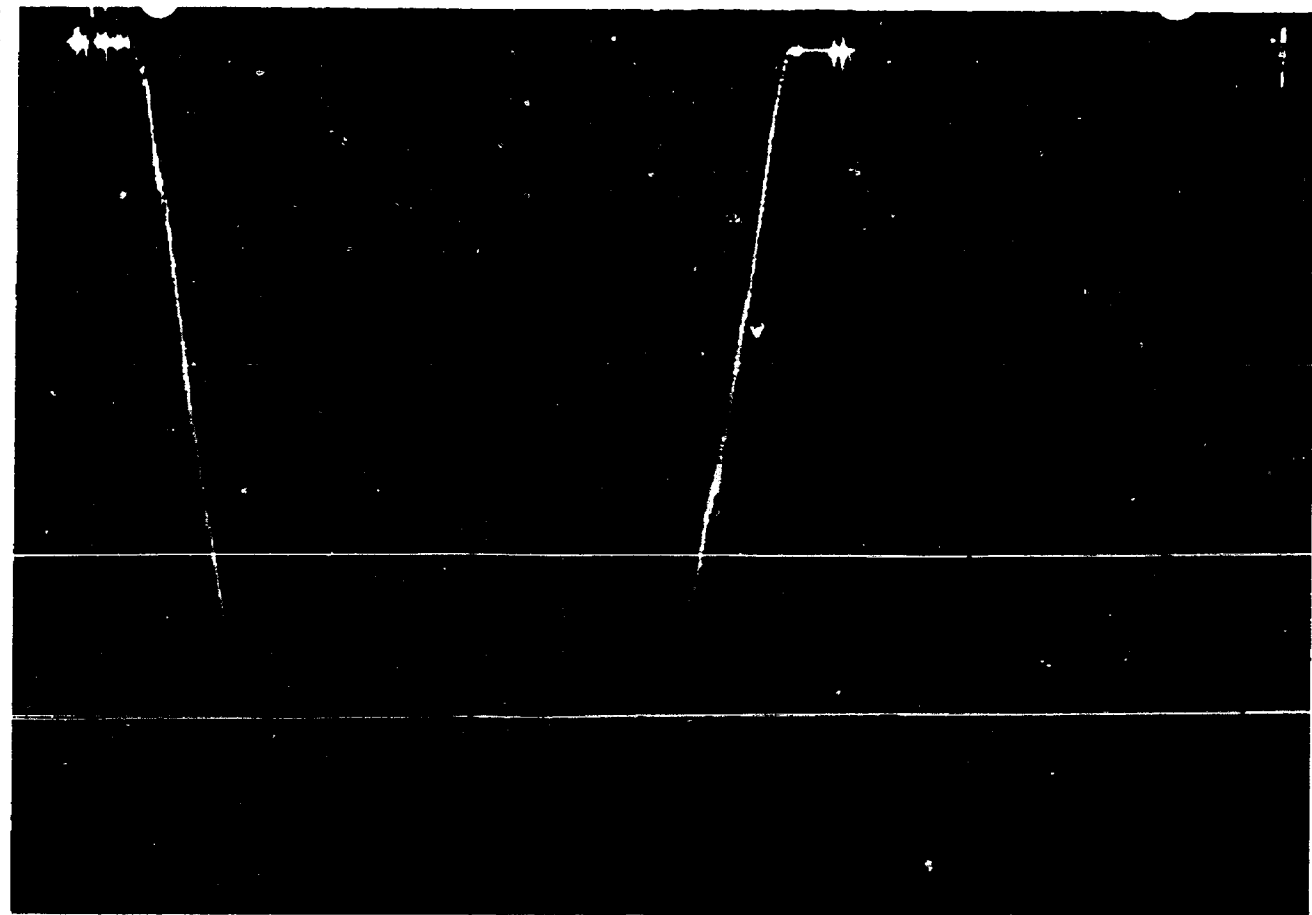
SW 30% 9700

BEFORE EXAMINER _____
OIL CONSERVATION DIVISION
EXHIBIT NO. 4
CASE NO. 6902
SUBMITTED BY Applicant
HEARING DATE 5/21/80

713720-1113

↓
PRESSURE

→
TIME



Each Horizontal Line Equal to 1000 p.s.i.

Casing perfs. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 713720
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

[illegible]

Gauge No. 1113			Depth 8399'		Clock No. 6728			24 hour		Ticket No. 713720					
First Flow Period			First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	194.9	.000		501.8	.000	526.8	.000		1019.7					
1	.017	268.9	.0099		3074.0	.0583**	607.5	.0099		3319.5					
2	.034	303.2	.0199		3364.6	.1068	693.5	.0198		3377.2					
3	.051	364.6	.0299		3382.6	.1554	779.5	.0296		3386.2					
4	.068	411.5	.0399		3389.9	.2039	860.2	.0395		3391.7					
5	.085	462.1	.0499		3393.5	.2525	956.9	.0494		3393.5					
6	.102	501.8	.0598		3395.3	.3010	1019.7	.0593		3395.3					
7			.0698		3397.1			.0691		3397.1					
8			.0798		3398.9			.0790		3398.9					
9			.0897		3400.7			.0889		3400.7					
10			.0997		3402.5			.0988		3400.7					
11			.1229		3402.5			.2206		3400.7					
12			.1462		3402.5			.3424		3400.7					
13			.1695		3402.5			.4642		3400.7					
14			.1927		3402.5			.5860		3400.7					
15			.1960		3402.5										

Gauge No. 1114			Depth 8476'			Clock No. 5979			hour 24					
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.
0	.000	166.1	.000		522.0	.000	558.1	.000		1036.1				
1	.0167	294.3	.0099		3362.3	.0590**	613.2	.0099		3384.4				
2	.0333	337.0	.0198		3393.9	.1082	701.2	.0197		3400.3				
3	.0500	384.4	.0298		3405.0	.1574	787.7	.0296		3408.2				
4	.0667	430.3	.0397		3409.8	.2066	872.6	.0394		3414.5				
5	.0834	482.6	.0496		3414.5	.2558	963.8	.0493		3417.7				
6	.1000	522.0	.0595		3417.7	.3050	1036.1	.0592		3419.3				
7			.0694		3419.3			.0590		3420.8				
8			.0794		3420.8			.0789		3422.4				
9			.0893		3422.4			.0887		3424.0				
10			.0992		3424.0			.0986		3425.6				
11			.1223		3425.6			.2202		3427.2				
12			.1455		3425.6			.3418		3428.8				
13			.1686		3425.6			.4634		3428.8				
14			.1918		3425.6			.5850		3428.8				
15			.1950		3425.6									

Reading Interval 5 * 15 *** Minutes

REMARKS: *-First 10 intervals equal to 3 minutes each; next 4 intervals equal to 7 minutes each; last interval equal to 1 minute. **-18 minutes ***-First 10 intervals equal to 3 minutes each; last 4 intervals equal to 37 minutes each.

SPECIAL PRESSURE DATA

TICKET NO. 713720

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	6.00"	3.00"	1.00'	8324.13'
Water Cushion Valve				
Drill Pipe	4.50"	3.640-3.826"	7912.13'	
Drill Collars	6.25"	2.00"	473'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler	5.00"	.75"	6.75'	8391.88'
Hydro-Spring Tester	5.00"	.75"	5.00'	8396.88'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5.00"	3.06"	4.14'	8398.76'
Hydraulic Jer	5.03"	1.00"	5.00'	
VR Safety Joint	5.00"	1.00"	2.78'	
Pressure Equalizing Crossover				
Packer Assembly	5.06"	1.53"	5.81'	8413.60'
Distributor				
Packer Assembly	5.06"	1.53"	5.81'	8419.41'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5.75"	1.50"	4.20'	
Packer Assembly	5.75"	2.62'	1.00' X over	
Distributor	6.25"	2.00"	28.89' Drill collar	
Packer Assembly	5.50"	2.25"	1.00' X over	
Anchor Pipe Safety Joint				
Side Well Anchor				
Drill Collars				
Flush Joint Anchor	5.75"	2.37"	20.00'	
Blanked-Off B.T. Running Case	5.75"	2.50"	4.00'	8476'
Total Depth				8480'

EQUIPMENT DATA

LITTLE'S 17036 7/57

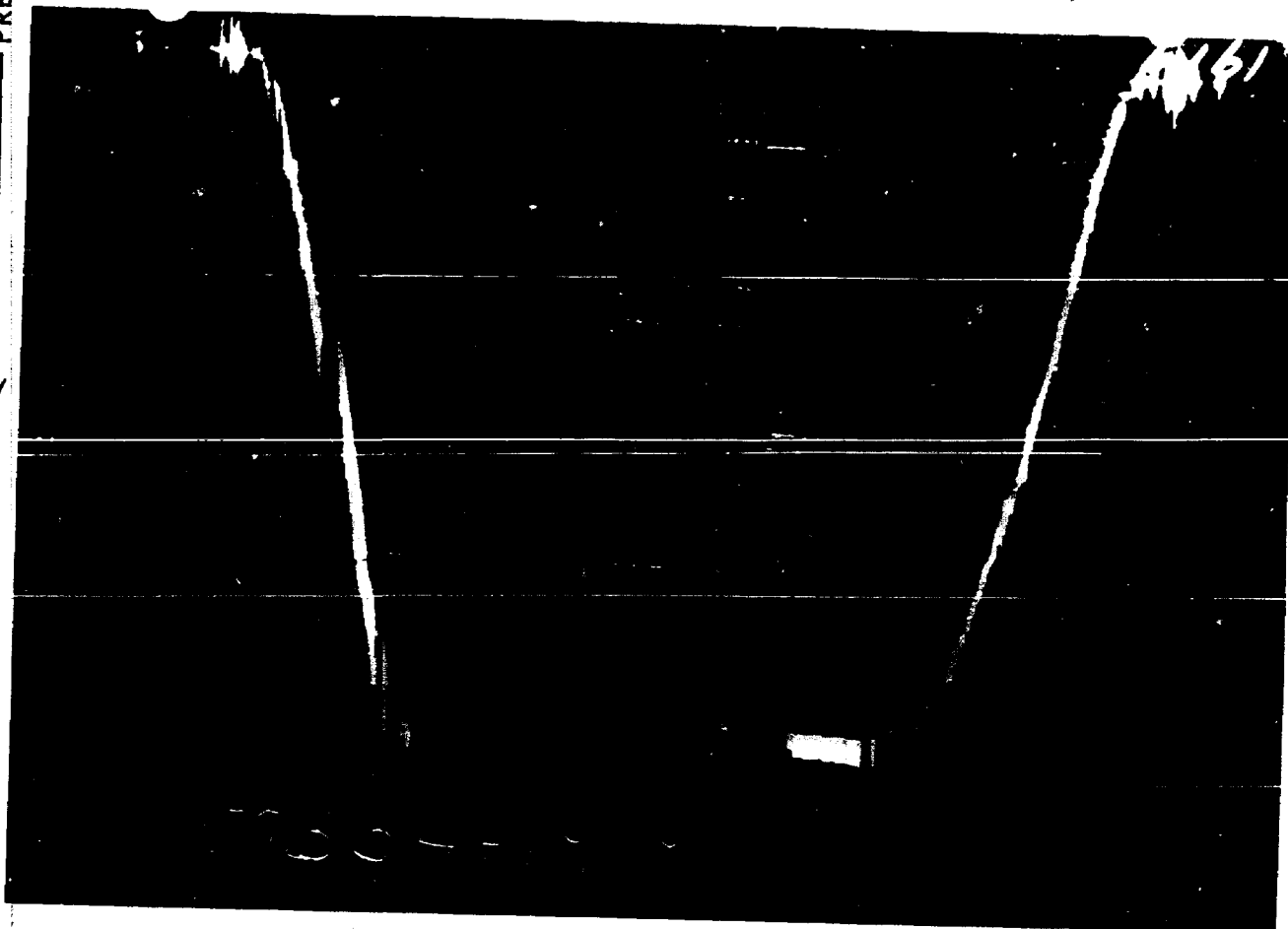
BEFORE EXAMINER _____
OIL CONSERVATION DIVISION
EXHIBIT NO. 5
CASE NO. 6902
SUBMITTED BY Applicant
HEARING DATE 5/21/80

PRESSURE



757334-1920

TIME



Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA				Date 3-17-80		Ticket Number 757334	
Sampler Pressure 50 ? P.S.I.G. at Surface Recovery: Cu. Ft. Gas 3.10 cc. Oil 0 cc. Water 0 cc. Mud 0 Tot. Liquid cc. 0				Kind of D.S.T. OPEN HOLE		Halliburton Location ARTESIA	
				Tester MR. DAVIS		Witness MR. HUBER	
				Drilling Contractor MORANCO DRILLING COMPANY #7		bc	
EQUIPMENT & HOLE DATA							
				Formation Tested Morrow -- Bottom			
				Elevation 3845' GL			
				Net Productive Interval 22'			
				All Depths Measured From Kelly Bushing (AGL) 3863.8'			
				Total Depth 12900'			
				Main Hole/Casing Size 7 7/8"			
				Drill Collar Length 450' I.D. 2"			
				Drill Pipe Length 12350' I.D. 3.826"			
				Packer Depth(s) 12817' - 12823'			
				Depth Tester Valve 12805'			
TYPE		AMOUNT		Depth Back		Surface	
Cushion				Ft. Pres. Valve		Choke Manifold	
						Bottom Choke .75"	
Recovered		2800 Feet of		Gas cut drilling fluid			
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks SEE PRODUCTION TEST DATA SHEET.							
Standard clock factor used to obtain times.							
TEMPERATURE		Gauge No. 1920		Gauge No. 1919		Gauge No.	
		Depth: 12809' Ft.		Depth: 12895' Ft.		Depth: Ft.	
		24 Hour Clock		24 Hour Clock		Hour Clock	
Est. °F.		Blanked Off NO		Blanked Off YES		Blanked Off	
Actual 171 °F.		Pressures		Pressures		Pressures	
		Field Office		Field Office		Field Office	
Initial Hydrostatic		6350 6363.4		6351 6377.7			
Flow Initial		4808 4726.0		5214 5158.4			
Flow Final		4854 5634.9		5237 5837.0			
Closed In		6057 6072.2		6087 6091.1			
Flow Initial							
Flow Final							
Closed In							
Flow Initial							
Flow Final							
Closed In							
Final Hydrostatic		6305 6367.9		6329 6402.2			

Legal Location Sec. - Twp. - Rng. 10 - 18 - 32

Lease Name YOUNG DEEP UNIT

Well No. 1

Test No. 5

Tested Interval 12823' - 12900'

Field Area WILDCAT

County LEA

State NEW MEXICO

Lease Owner/Company Name HARVEY C. YATES COMPANY

Gauge No. 1920			Depth 12809'			Clock No. 16710			24 hour		Ticket No. 757334					
First Flow Period			First Closed In Pressure			Second Flow Period			Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	
0	.0000	4726.0	.0000		5634.9											
1	.0034	4767.1	.0095		6060.9											
2	.0068	4796.8	.0190		6063.2											
3	.0102	4865.2	.0285		6063.2											
4	.0135	4897.2	.0379		6065.4											
5	.0169	4933.7	.0474		6065.4											
6	.0203	4995.4	.0569		6065.4											
7	.0237	5081.6	.0664		6065.4											
8	.0271	5188.2	.0759		6067.7											
9	.0305	5274.3	.0854		6067.7											
10	.0338	5367.3	.0949		6069.9											
11	.0372	5492.0	.2213		6069.9											
12	.0406	5609.9	.3478		6072.2											
13	.0440	5634.9	.4743		6072.2											
14			.6008		6072.2											
15			.7810		6072.2											

Gauge No. 1919			Depth 12895'			Clock No. 13528			24 hour	
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	
0	.0000	5158.4	.0000		5837.0					
1	.0035	5187.4	.0100		6075.5					
2	.0069	5225.4	.0200		6079.9					
3	.0104	5258.9	.0300		6082.2					
4	.0138	5281.2	.0399		6084.4					
5	.0173	5310.2	.0499		6086.6					
6	.0208	5341.5	.0599		6086.6					
7	.0242	5392.8	.0699		6086.6					
8	.0277	5437.4	.0799		6086.6					
9	.0312	5506.6	.0899		6086.6					
10	.0345	5569.1	.0998		6086.6					
11	.0381	5624.9	.2330		6088.8					
12	.0415	5707.5	.3661		6091.1					
13	.0450	5837.0	.4992		6091.1					
14			.6323		6091.1					
15			.8220		6091.1					

Reading Interval 1 Minutes

REMARKS: *First 10 intervals = 3 minutes each; next 4 intervals = 40 minutes each; last interval = 57 minutes

SPECIAL PRESSURE DATA

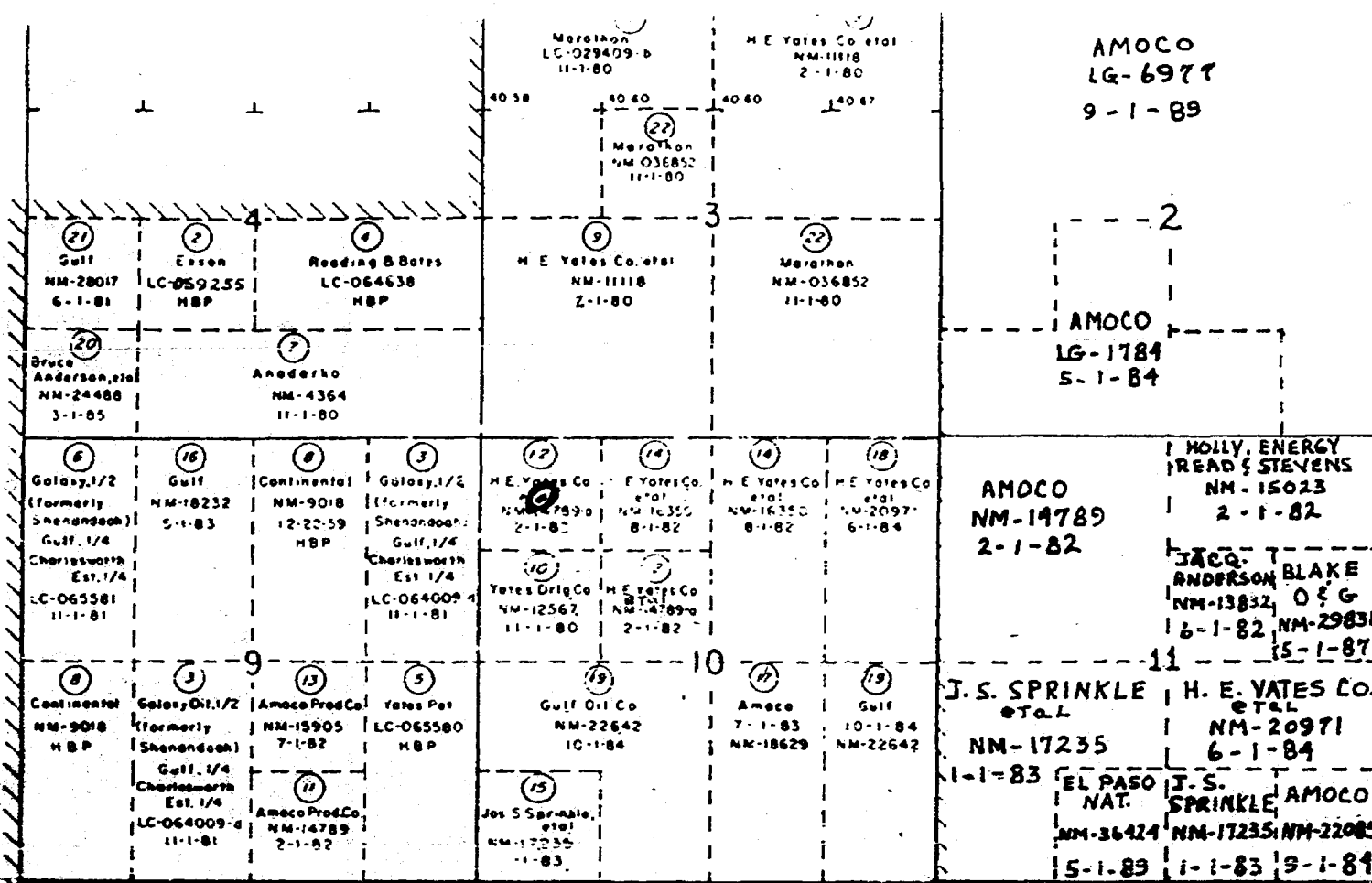
TICKET NO.

757334

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	12350'	
Drill Collars	6.25"	2.25"	450'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	7'	12800'
Dual CIP Sampler	5"	.75"	5'	12805'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint*				
AP Running Case	5"	3"	4'	12809'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	6'	12817'
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	12823'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Well Anchor				
Drill Collars	6 1/2"	2.25"	28.89'	
Flush Joint Anchor	5 3/4"	2.87"	38.38'	
Blanked-Off B.T. Running Case	5 3/4"	-	5'	12895'
Total Depth				12900'

EQUIPMENT DATA

LITTLE 11000 7500 300



BEFORE EXAMINER	
OIL CONSERVATION DIVISION	
EXHIBIT NO.	1
CASE NO.	6902
SUBMITTED BY	Applicant
HEARING DATE	5/2/80

R - 32 - E

Unit Outline
 Tract Number
 Federal Lands
 2,242.45 ac, 100% of Unit Area

YOUNG DEEP UNIT #1
 PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - MORROW
 PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - BONE SPRINGS

EXHIBIT "A"

YOUNG DEEP UNIT AREA
 LEA COUNTY, NEW MEXICO

Scale: 1" = 2000'

Marathon LC-029409-B 11-1-80 40 50 40 60 40 60 40 67 22 Marathon NM-036852 11-1-80 9 H E Yates Co. et al NM-11118 2-1-80 3 Marathon NM-036852 11-1-80	AMOCO LG-6977 9-1-89 2 AMOCO LG-1784 5-1-84
12 H E Yates Co. NM-1789 2-1-82 14 F Yates Co. NM-16350 8-1-82 16 H E Yates Co. NM-16350 8-1-82 18 H E Yates Co. NM-20971 6-1-84 20 H E Yates Co. NM-12567 1-1-80 2 H E Yates Co. NM-1789 2-1-82 10 Gulf Oil Co. NM-22642 10-1-84 17 Amoco 7-1-83 NM-18629 19 Gulf 10-1-84 NM-22642	AMOCO NM-14789 2-1-82 HOLLY ENERGY READ & STEVENS NM-15023 2-1-82 JACQ. T. BLAKE ANDERSON NM-13832, O & G 6-1-82 NM-29831 5-1-87 J. S. SPRINKLE ET AL NM-17235 1-1-83 H. E. YATES CO. ET AL NM-20971 6-1-84 EL PASO NAT. SPRINKLE AMOCO NM-36424 NM-17235 NM-22085 5-1-89 1-1-83 9-1-84

T
18
S

BEFORE EXAMINER _____
OIL CONSERVATION DIVISION
EXHIBIT NO. <u>1</u>
CASE NO. <u>6902</u>
SUBMITTED BY <u>Applicant</u>
HEARING DATE <u>5/2/80</u>

YOUNG DEEP UNIT #1

PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - MORROW

PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - BONE SPRINGS

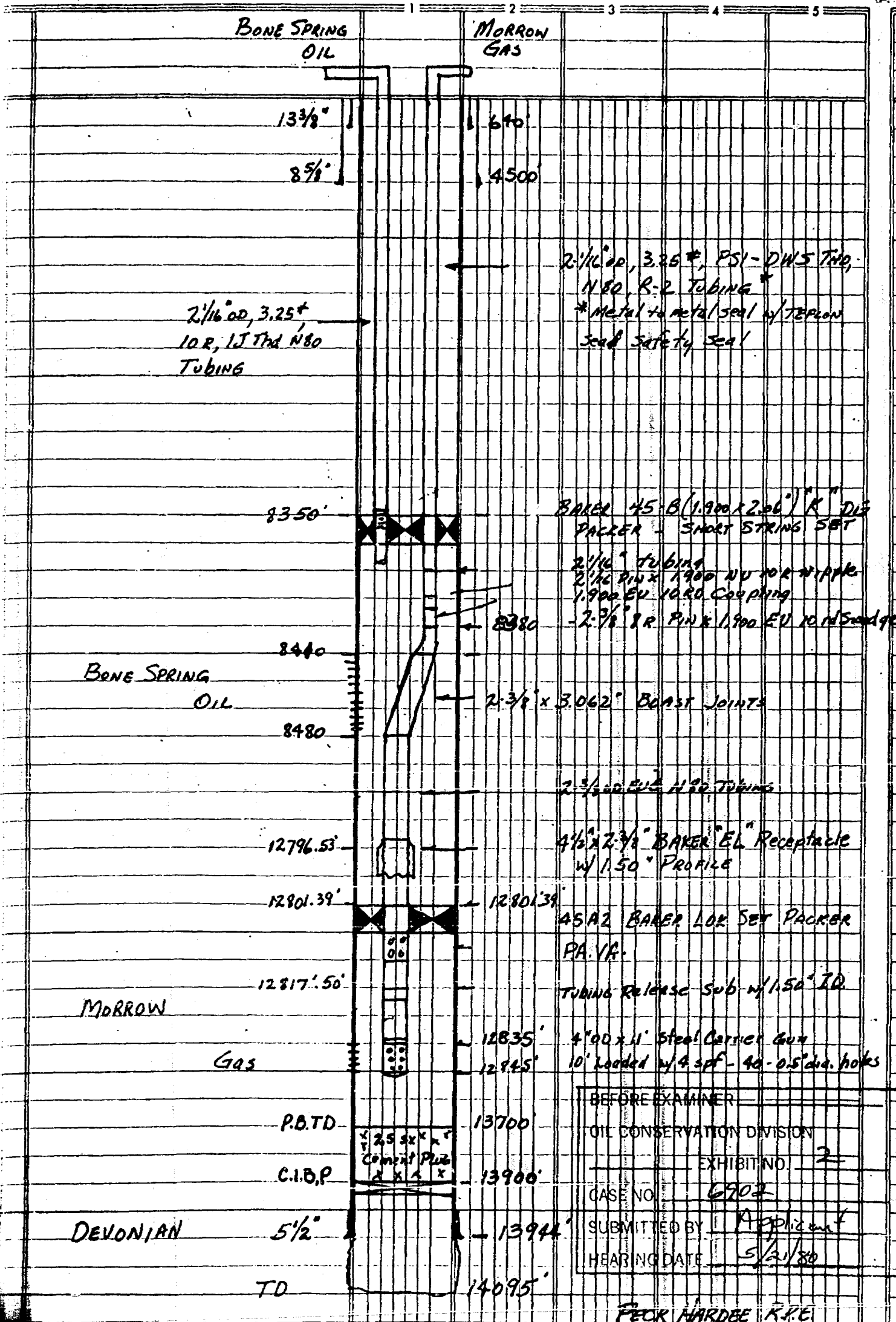
EXHIBIT "A"

YOUNG DEEP UNIT AREA
LEA COUNTY, NEW MEXICO

APPLICATION TO DUAL COMPLETE

HARVEY E. YATES, CO.

YOUNG DEEP UNIT WELL No 1
SECTION 10, TWP. 18-S, RGE. 32-E, LEA CO., NEW MEXICO



Prepared By	Initials	Date
Approved By		

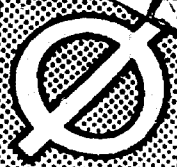
BEFORE EXAMINER
OIL CONSERVATION DIVISION
EXHIBIT NO. 2
CASE NO. 6902
SUBMITTED BY Applicant
HEARING DATE 5/21/80

FECK HARDEE, R.E.

Dresser Atlas

Combination Logging Systems

DRESSER

Compensated **Densilog®**
Compensated **Neutron®**

LE NO.

COMPANY HARVEY E. YATES CO.WELL YOUNG DEEP UNIT #1FIELD WILLOCATCOUNTY LEA STATE NEW MEXICOLOCATION: 660' FNL + FEL

Other Services

OLL/MLL
DIPLOGSEC 10 TWP 18-S RGE 32-EPermanent Datum GROUND LEVEL Elev. 3848.8
g Measured from KB 15 Ft. Above Permanent Datum
illing Measured from KB

Elevations:

KB 3843.8

DF

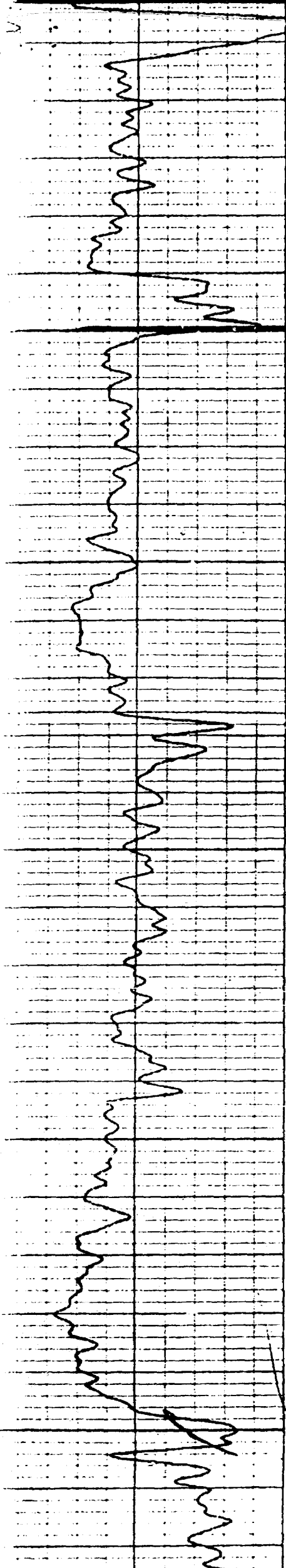
GL 3848.8

le	4/1/80				
n No.	ONE				
yice Order	14656				
pth—Driller	13940				
pth—Logger	13960				
ottom Logged Interval	1395-B				
p Logged Interval	4450				
ing—Driller	8 1/8 @ 4500	@			
ing—Logger	4493				
Size	7 7/8				
pe Fluid in Hole	BRINE POLY-KCL				
Density and Viscosity	9.6 3B				
pH and Fluid Loss	9.5 S CC				
Source of Sample	PIT				
Rm @ Meas. Temp.	.140 @ 74 °F	T/BS	6245'		
Rmf @ Meas. Temp.	.100 @ 74 °F	T/BS	8925 °F	@	°F
Rmc @ Meas. Temp.	— @ — °F	T/BS	8600 °F	@	°F
Source of Rmf and Rmc	M		8650 °F	@	°F
Rm @ BHT	.065 @ 170 °F	T/BS	8375		
ne Since Circ.	8 HOURS	T/BS	9484 °F	@	°F
ax. Rec. Temp. Deg. F.	170 °F	T/BS	1600		
quip. No. and Location	6136 HOBBS	T/BS	12230 °F		°F
orded By	FRANKLIN	T/BS	13276		
ressed By	SMITH	T/BS	13860		
		T/BS	13976		

BEFORE EXAMINER

OIL CONSERVATION DIVISION

CASE NO. 3SUBMITTED BY ApplicantHEARING DATE 5/21/80



084000

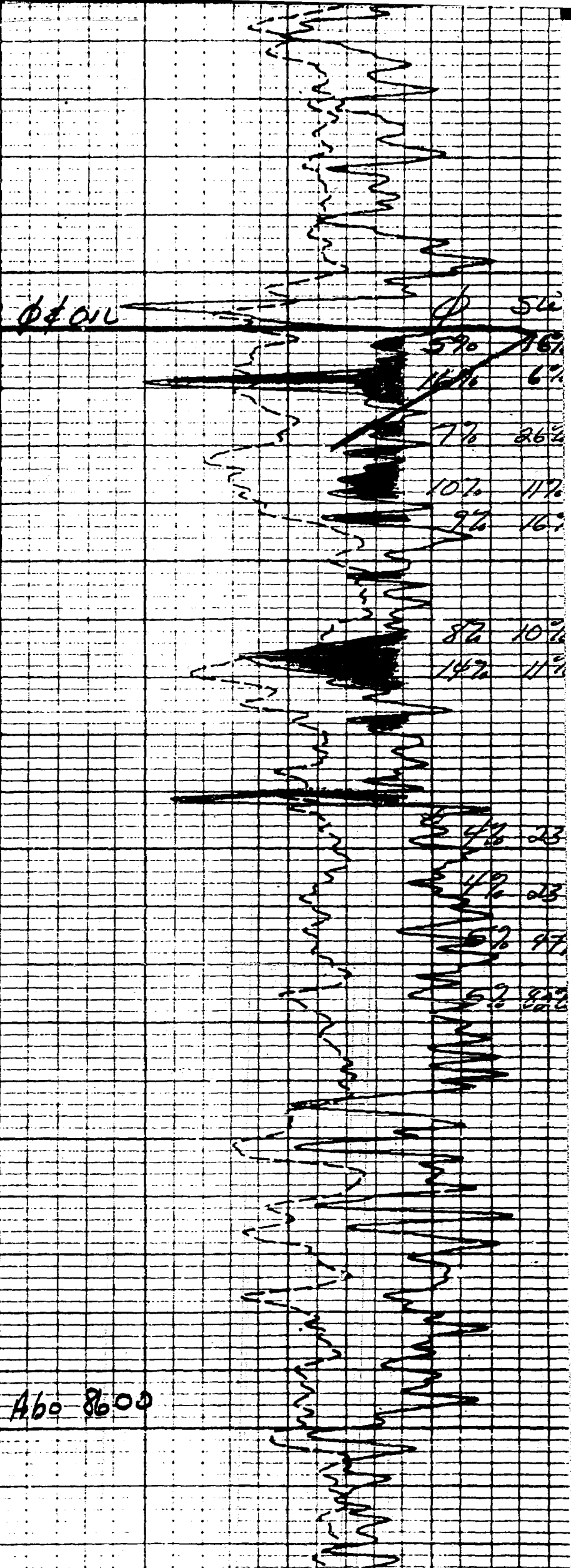
B.SP ϕ OIL

A5T#2

R/4428
FO

08500

08600



ϕ 54

59% 16%

16% 6%

7% 26%

10% 11%

9% 16%

8% 10%

14% 11%

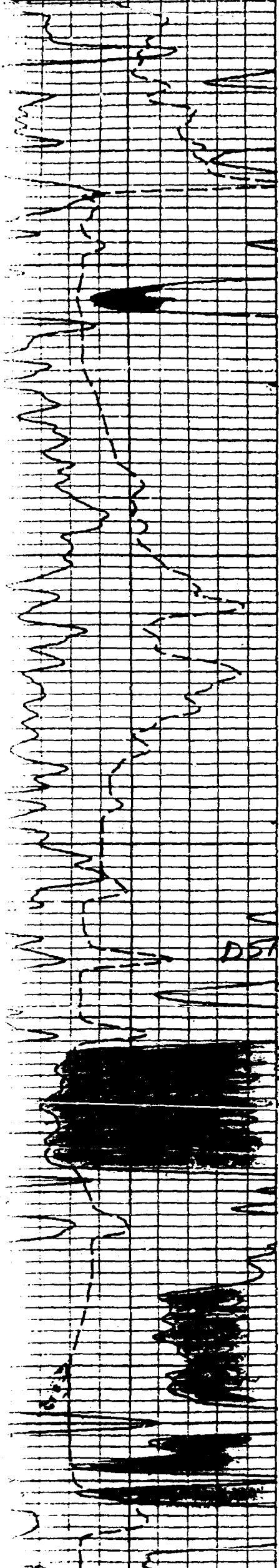
4% 23

4% 23

5% 9%

5% 8%

A60 8000



12700

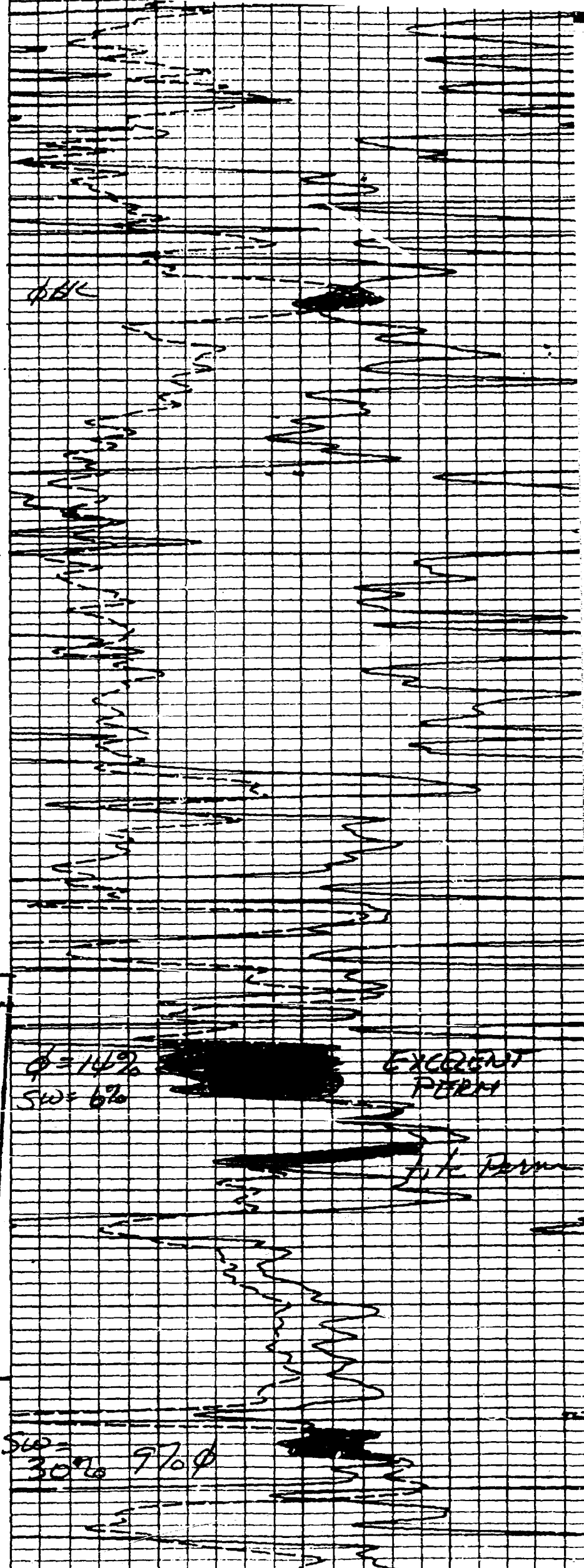
12800

12900

DST #5

GTSD
13.6MM

00008



φBK

$\phi = 14\%$
SW = 6%

EXCERPT
PERM

J. K. Perma

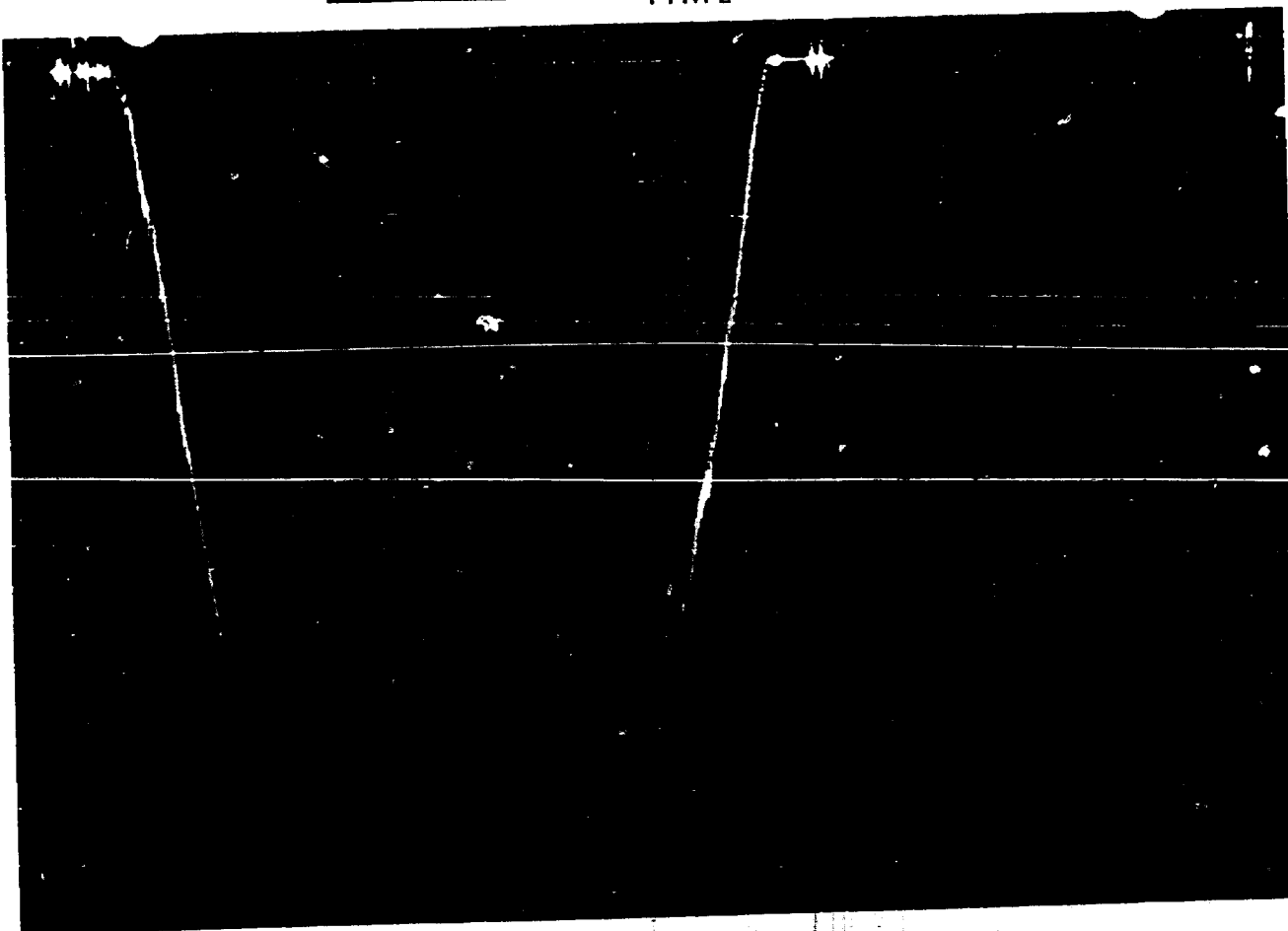
SW = 30% 7% φ

BEFORE EXAMINER _____
OIL CONSERVATION DIVISION
EXHIBIT NO. 4
CASE NO. 6902
SUBMITTED BY Applicant
HEARING DATE 5/21/80

713720-1113

PRESSURE

TIME



Each Horizontal Line Equal to 1000 p.s.i.

Gauge No. 1113			Depth 8399'			Clock No. 6728			24 hour		Ticket No. 713720				
First Flow Period			First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.000	194.9	.000		501.8	.000	526.8	.000		1019.7					
1	.017	268.9	.0099		3074.0	.0583**	607.5	.0099		3319.5					
2	.034	303.2	.0199		3364.5	.1068	693.5	.0198		3377.2					
3	.051	364.6	.0299		3382.6	.1554	779.5	.0296		3386.2					
4	.068	411.5	.0399		3389.9	.2039	860.2	.0395		3391.7					
5	.085	462.1	.0499		3393.5	.2525	956.9	.0494		3393.5					
6	.102	501.8	.0598		3395.3	.3010	1019.7	.0593		3395.3					
7			.0698		3397.1			.0691		3397.1					
8			.0798		3398.9			.0790		3398.9					
9			.0897		3400.7			.0889		3400.7					
10			.0997		3402.5			.0988		3400.7					
11			.1229		3402.5			.2206		3400.7					
12			.1462		3402.5			.3424		3400.7					
13			.1695		3402.5			.4642		3400.7					
14			.1927		3402.5			.5860		3400.7					
15			.1960		3402.5										

Gauge No. 1114			Depth 8476'			Clock No. 5979			hour 24							
0	.000	166.1	.000		522.0	.000	558.1	.000		1036.1						
1	.0167	294.3	.0099		3362.3	.0590**	613.2	.0099		3384.4						
2	.0333	337.0	.0198		3393.9	.1082	701.2	.0197		3400.3						
3	.0500	384.4	.0298		3405.0	.1574	787.7	.0296		3408.2						
4	.0667	430.3	.0397		3409.8	.2066	872.6	.0394		3414.5						
5	.0834	482.6	.0496		3414.5	.2558	963.8	.0493		3417.7						
6	.1000	522.0	.0595		3417.7	.3050	1036.1	.0592		3419.3						
7			.0694		3419.3			.0690		3420.8						
8			.0794		3420.8			.0789		3422.4						
9			.0893		3422.4			.0887		3424.0						
10			.0992		3424.0			.0986		3425.6						
11			.1223		3425.6			.2202		3427.2						
12			.1455		3425.6			.3418		3428.8						
13			.1686		3425.6			.4634		3428.8						
14			.1918		3425.6			.5850		3428.8						
15			.1950		3425.6											

Reading Interval 5 * 15 *** Minutes

REMARKS: *-First 10 intervals equal to 3 minutes each; next 4 intervals equal to 7 minutes each; last interval equal to 1 minute. **-18 minutes ***-First 10 intervals equal to 3 minutes each; last 4 intervals equal to 37 minutes each.

SPECIAL PRESSURE DATA

TICKET NO. 713720

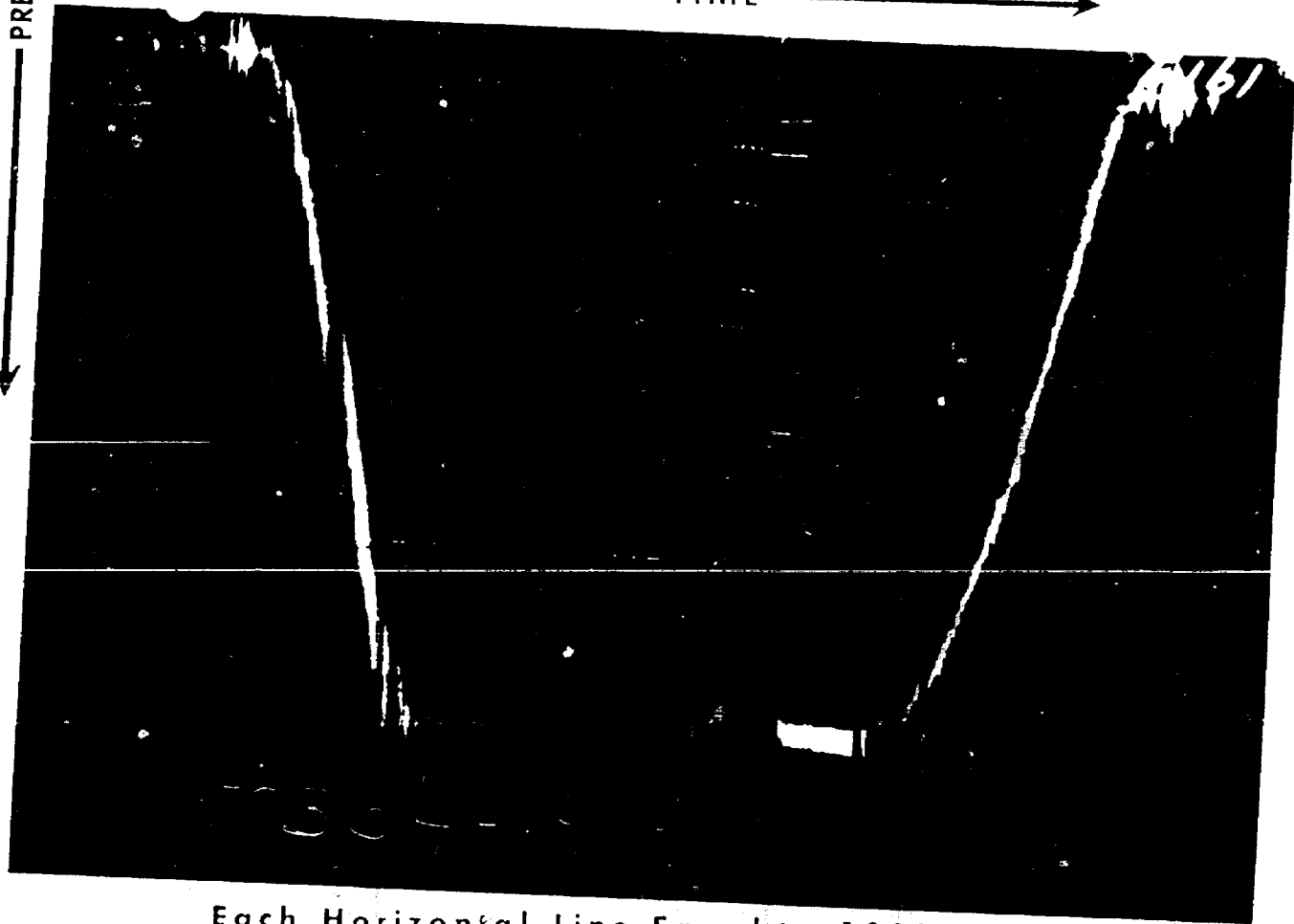
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub	6.00"	3.00"	1.00'	8324.13'
Water Cushion Valve				
Drill Pipe	4.50"	3.640-3.826"	7912.13'	
Drill Collars	6.25"	2.00"	473'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler	5.00"	.75"	6.75'	8391.88'
Hydro-Spring Tester	5.00"	.75"	5.00'	8396.88'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5.00"	3.06"	4.14'	8398.76'
Hydraulic Jar	5.03"	1.00"	5.00'	
VR Safety Joint	5.00"	1.00"	2.78'	
Pressure Equalizing Crossover				
Packer Assembly	5.06"	1.53"	5.81'	8413.60'
Distributor				
Packer Assembly	5.06"	1.53"	5.81'	8419.41'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5.75"	1.50"	4.20'	
	5.75"	2.62'	1.00' X over	
Packer Assembly	6.25"	2.00"	28.89' Drill collar	
Distributor	5.50"	2.25"	1.00' X over	
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5.75"	2.87"	20.00'	
Blanked-Off B.T. Running Case	5.75"	2.50"	4.00'	8476'
Total Depth				8480'

BEFORE EXAMINER _____
OIL CONSERVATION DIVISION
EXHIBIT NO. 5
CASE NO. 6902
SUBMITTED BY Applicant
HEARING DATE 5/21/80

PRESSURE

757334-1920

TIME



Each Horizontal Line Equal to 1000 p.s.i.

Gauge No. 1920			Depth 12809'			Clock No. 16710			24 hour		Ticket No. 757334				
First Flow Period			First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{1+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{1+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{1+\theta}{\theta}$	PSIG Temp. Corr.
0	.0000	4726.0	.0000		5634.9										
1	.0034	4767.1	.0095		6060.9										
2	.0068	4796.8	.0190		6063.2										
3	.0102	4865.2	.0285		6063.2										
4	.0135	4897.2	.0379		6065.4										
5	.0169	4933.7	.0474		6065.4										
6	.0203	4995.4	.0569		6065.4										
7	.0237	5081.6	.0664		6065.4										
8	.0271	5188.2	.0759		6067.7										
9	.0305	5274.3	.0854		6067.7										
10	.0338	5367.3	.0949		6069.9										
11	.0372	5492.0	.2273		6069.9										
12	.0406	5609.9	.3478		6072.2										
13	.0440	5634.9	.4743		6072.2										
14			.6008		6072.2										
15			.7810		6072.2										

Gauge No. 1919			Depth 12895'			Clock No. 13528			24 hour							
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{1+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"			Time Defl. .000"	$\text{Log } \frac{1+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"		Time Defl. .000"	$\text{Log } \frac{1+\theta}{\theta}$	PSIG Temp. Corr.
0	.0000	5158.4	.0000		5837.0											
1	.0035	5187.4	.0100		6075.5											
2	.0069	5225.4	.0200		6079.9											
3	.0104	5258.9	.0300		6082.2											
4	.0138	5281.2	.0399		6084.4											
5	.0173	5310.2	.0499		6086.6											
6	.0208	5341.5	.0599		6086.6											
7	.0242	5392.8	.0699		6086.6											
8	.0277	5437.4	.0799		6086.6											
9	.0312	5506.6	.0899		6086.6											
10	.0345	5569.1	.0998		6086.6											
11	.0381	5624.9	.2330		6088.8											
12	.0415	5707.5	.3661		6091.1											
13	.0450	5837.0	.4992		6091.1											
14			.6323		6091.1											
15			.8220		6091.1											

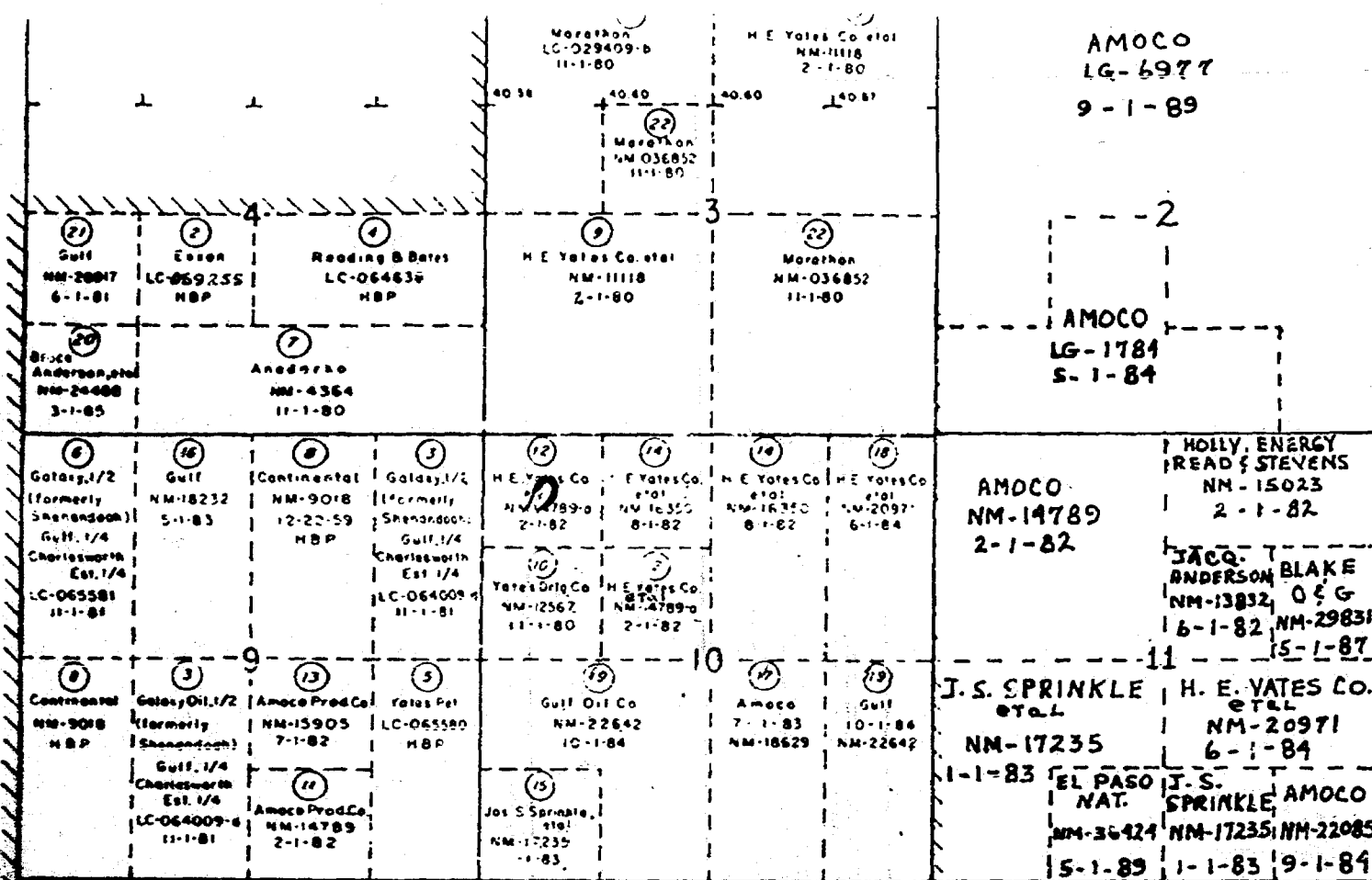
Reaping Interval 1

Minutes

REMARKS: *First 10 intervals = 3 minutes each; next 4 intervals = 40 minutes each; last interval = 57 minutes

TICKET NO. 757334

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Drill Collars				
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	12350'	
Drill Collars	6.25"	2.25"	450'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	7'	12800'
Dual CIP Sampler	5"	.75"	5'	12805'
Hydro-Spring Tester				
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3"	4'	12809'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	6'	12817'
Distributor				
Packer Assembly	6 3/4"	1.53"	6'	12823'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Well Anchor				
Drill Collars	6 1/4"	2.25"	28.89'	
Flush Joint Anchor	5 3/4"	2.87"	38.38'	
Blanked-Off B.T. Running Case	5 3/4"	-	5'	12895'
Total Depth				12900'



BEFORE EXAMINER _____
 OIL CONSERVATION DIVISION
 EXHIBIT NO. _____
 CASE NO. 6902
 SUBMITTED BY Applicant
 HEARING DATE 5/2/84

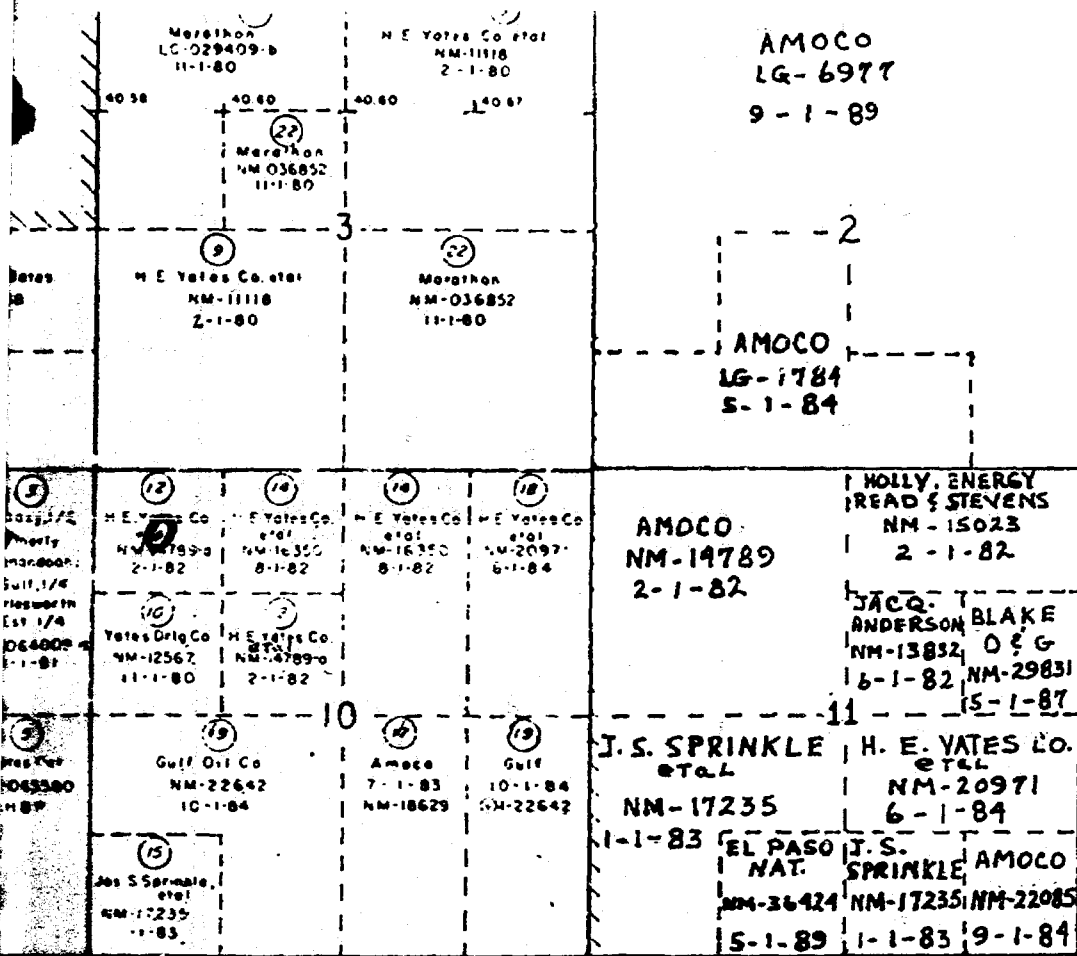
Unit Outline
 Tract Number
 Federal Lands
 2,242.45 ac., 100% of Unit Area

Scale: 1" = 2000'

YOUNG DEEP UNIT #1
 PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - MORROW
 PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - BONE SPRINGS

EXHIBIT "A"

YOUNG DEEP UNIT AREA
 LEA COUNTY, NEW MEXICO



T
18
S

BEFORE EXAMINER	_____
OIL CONSERVATION DIVISION	_____
EXHIBIT NO.	<u>1</u>
CASE NO.	<u>6902</u>
SUBMITTED BY	<u>Applicant</u>
HEARING DATE	<u>5/21/80</u>

YOUNG DEEP UNIT #1
 PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - MORROW
 PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - BONE SPRINGS

EXHIBIT "A"

YOUNG DEEP UNIT AREA
 LEA COUNTY, NEW MEXICO

Docket No. 14-80

Dockets Nos. 16-80 and 17-80 are tentatively set for June 4 and 25, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - TUESDAY - MAY 20, 1980

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6715: (DE NOVO)

Application of Texaco Inc. for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Loomis Fed. Well No. 1 to be drilled 1600 feet from the North line and 660 feet from the West line of Section 5, Township 21 South, Range 32 East, South Salt Lake-Morrow Gas Pool, the N/2 of said Section 5 to be dedicated to the well.

Upon application of Texaco Inc. and Bass Enterprises Production Company this case will be heard De Novo pursuant to the provisions of Rule 1220.

Docket No. 15-80

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 21, 1980

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for June, 1980, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for June, 1980, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 6891: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Midwest Refining Company and all other interested parties to appear and show cause why the State Well No. 1 located in Unit A of Section 16, Township 33 South, Range 14 West, Hidalgo County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6859: (Continued from April 9, 1980, Examiner Hearing)

Application of R & C Drilling Company for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 1890 feet from the North line and 1630 feet from the East line of Section 28, Township 28 North, Range 11 West, Kutz-Fruitland Pool, the NE/4 of said Section 28 to be dedicated to the well.

CASE 6886: (Continued from May 7, 1980, Examiner Hearing)

Application of Aminoil USA, Inc. for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the S/2 of Section 10, Township 24 South, Range 28 East, to be dedicated to a well to be drilled at an unorthodox location 2080 feet from the South line and 1773 feet from the East line of said Section 10. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6884: (Continued from May 7, 1980, Examiner Hearing)

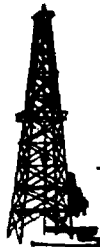
Application of Supron Energy Corporation for compulsory pooling and a dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde and Dakota formations underlying the N/2 of Section 4, Township 30 North, Range 11 West, to be dedicated to a proposed dual completion to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- CASE 6892:** Application of Merrion & Bayless for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the South Blanco-Pictured Cliffs Pool underlying the SW/4 of Section 27, Township 24 North, Range 2 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6878:** (Readvertised)
- Application of Stevens Oil Company for a non-standard gas proration unit and unorthodox location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the N/2 SW/4 and S/2 NW/4 of Section 25, Township 8 South, Range 28 East, Twin Lakes-San Andres Associated Pool, to be dedicated to its O'Brien "F" Well No. 4 at an unorthodox location 1650 feet from the South line and 2310 feet from the West line of said Section 25.
- CASE 6893:** Application of Stevens Oil Company to amend Order No. R-5353, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks a revision of the special rules for the Twin Lakes-San Andres Associated Pool as promulgated by Order No. R-5353 to provide that each well, oil or gas, shall be located no nearer than 330 feet to any quarter-quarter section line, except that any well drilled in a known gas productive area shall be located within 150 feet of the center of the quarter-quarter section.
- CASE 6894:** Application of Sun Oil Company for an unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jennings-Federal "B" Well No. 1, a Yates test to be drilled 2440 feet from the South line and 2290 feet from the West line of Section 15, Township 19 South, Range 32 East, Lusk Field, the NE/4 SW/4 to be dedicated to the well.
- CASE 6895:** Application of Sun Gas Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks findings that the drilling of its J. A. Akens Well No. 10 located in Unit N of Section 3, Township 21 South, Range 36 East, was necessary to effectively and efficiently drain that portion of an existing proration unit which could not be drained by the existing well.
- CASE 6896:** Application of John E. Schalk for a non-standard gas proration unit and an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard Blanco Mesaverde gas proration unit comprising the NE/4 of Section 8, Township 25 North, Range 3 West, to be dedicated to his Gulf Well No. 2 to be drilled at an unorthodox location 1925 feet from the North line and 790 feet from the East line of said Section 8.
- CASE 6897:** Application of McClellan Oil Corporation for two compulsory poolings, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from 1200 feet below the surface to the base of the Abo formation underlying the SW/4 and the SE/4 of Section 30, Township 6 South, Range 26 East, each to be dedicated to a proposed gas well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.
- CASE 6898:** Application of Conoco Inc. for an unorthodox gas well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Meyer B-28 Well No. 4 to be drilled 560 feet from the North line and 1980 feet from the West line of Section 28, Township 20 South, Range 37 East, Eumont Gas Pool, to be simultaneously dedicated with its Meyer B-28 Well No. 1 in Unit G to the NE/4 and E/2 NW/4 of said Section 28.
- CASE 6899:** Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Horrow test well to be drilled 660 feet from the South and East lines of Section 9, Township 17 South, Range 26 East, the E/2 of said Section 9 to be dedicated to the well.
- CASE 6900:** Application of Yates Petroleum Corporation for a non-standard oil proration unit, unorthodox well location, and downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard oil proration unit comprising the N/2 SE/4 of Section 22, Township 16 South, Range 33 East, Kemnitz Field, to be dedicated to its Sombrero "MS" State Well No. 1 at an unorthodox location 1650 feet from the South and East lines of said Section 22. Applicant also seeks approval for the downhole commingling of Wolfcamp and Cisco production in the wellbore of said well.

- CASE 6901: Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Mississippian formations underlying the E/2 of Section 19, Township 14 South, Range 36 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6902: Application of Harvey E. Yates Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Young Deep Unit Well No. 1 located in Unit D of Section 10, Township 18 South, Range 32 East, to produce gas from the Morrow formation and oil from the Bone Springs formation thru parallel strings of tubing.
- CASE 6903: Application of Harvey E. Yates Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Pennsylvanian-Mississippian test well to be drilled 660 feet from the South line and 990 feet from the East line of Section 33, Township 13 South, Range 36 East, the S/2 of said Section 33 to be dedicated to the well.
- CASE 6904: Application of Harvey E. Yates Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the McDonald Unit Area, comprising 1,440 acres, more or less, of fee lands in Townships 13 and 14 South, Range 36 East.
- CASE 6905: Application of Harvey E. Yates Company for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Buffalo Lake Unit Area, comprising 2,560 acres, more or less, of Federal, State, and fee lands in Township 15 South, Range 27 East.

HEYCO

PETROLEUM PRODUCERS



HARVEY E. YATES COMPANY

P. O. BOX 1933

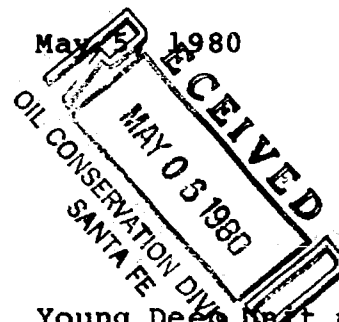
SUITE 300, SECURITY NATIONAL BANK BUILDING

505/623-6601

ROSWELL, NEW MEXICO 88201

Case 6902

State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501



Re: Young Deers Unit #1
Application for
Dual Completion
Unit D, Section 10,
T-18S, R-32E
Lea County, New Mexico

Gentlemen:

Enclosed for filing is an original and two executed copies of the above referenced application. This application was previously called in by telephone and is set for hearing on the May 21, 1980 docket.

Sincerely,

Robert H. Strand

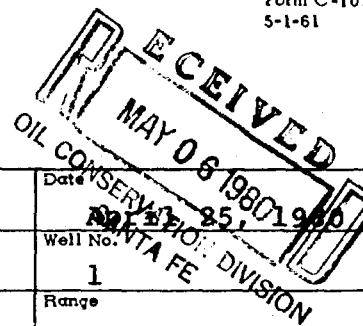
RHS/lh
OCL-1 #28

Enclosures

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION

Case 6702

Form C-107
5-1-61



Operator Harvey E. Yates Company		County Lea	Date MAY 06 1980
Address P. O. Box 1933, Roswell, N.M. 88201		Lease Young Deep Unit	Well No. 1
Location of Well D	Unit 10	Township 18S	Range 32E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____; Operator Lease, and Well No.: _____

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Und. Bone Springs		Und. Morrow
b. Top and Bottom of Pay Section (Perforations)	8410' - 8476'		12835' - 12845'
c. Type of production (Oil or Gas)	Oil		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

4. The following are attached. (Please check YES or NO)

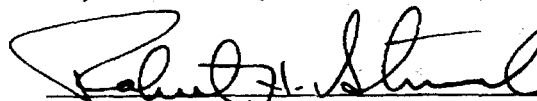
- | | | |
|-------------------------------------|-------------------------------------|---|
| Yes | No | |
| ☒ | ☐ | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| ☒ | ☐ | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease. |
| ☐ | ☒ | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.* |
| ☒ | ☐ | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.) |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

See attached list

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO _____. If answer is yes, give date of such notification April 29, 1980.

CERTIFICATE: I, the undersigned, state that I am the Attorney for Harvey E. Yates Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.


Signature

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

APPLICATION TO DUAL COMPLETE

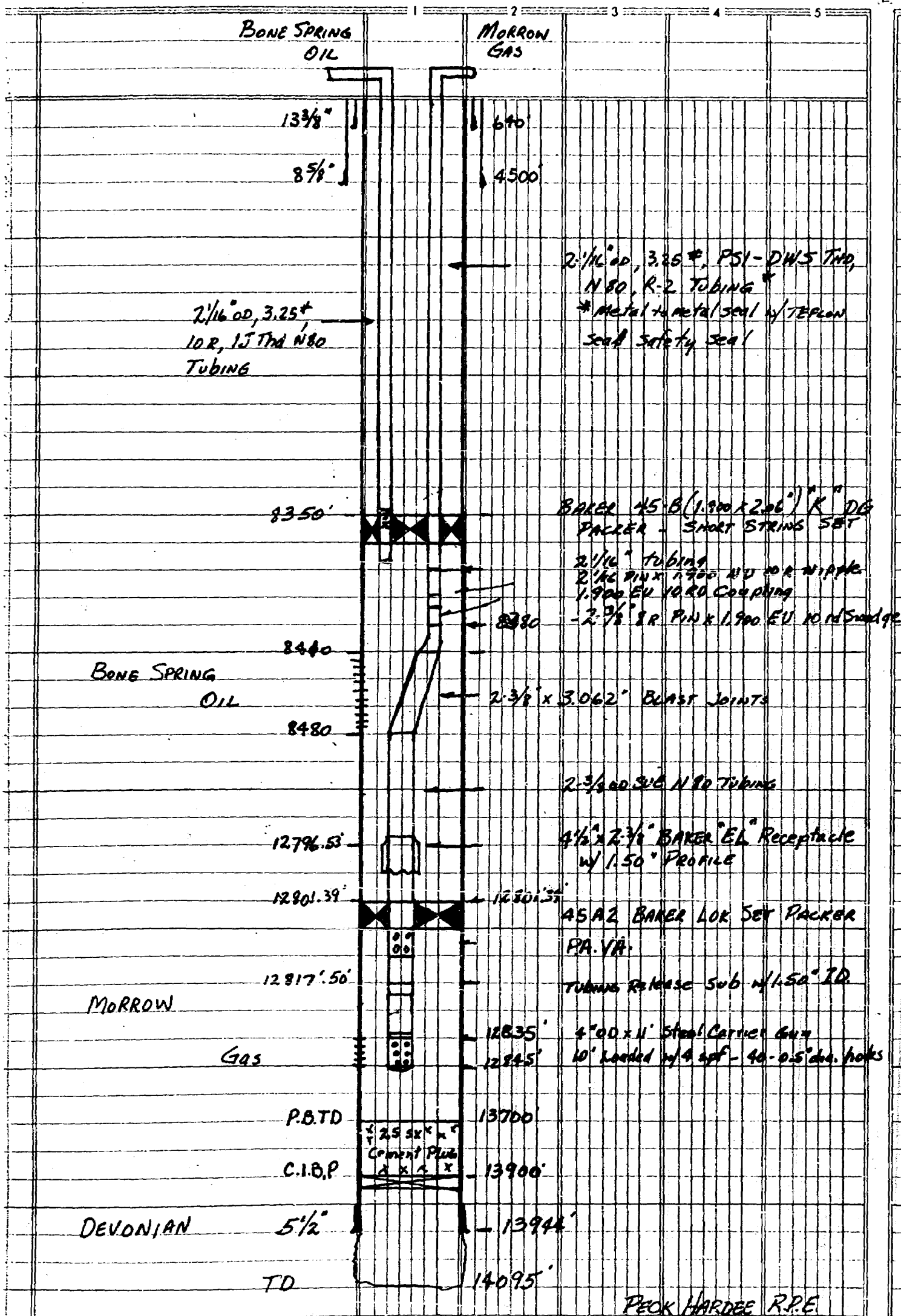
HARVEY E. YATES, CO.

YOUNG DEEP UNIT WELL No 1

SECTION 10, TWP. 18-S, RGE. 32-E, LEA CO., NEW MEXICO

45 664 EYEASE

Prepared By	Initials	Date
Approved By		



YOUNG DEEP UNIT

HARVEY E. YATES COMPANY
P. O. Box 1933
Roswell, New Mexico 88201

MARATHON OIL COMPANY
C & K Petroleum Building
Attn: A. W. Hanley
P. O. Box 552
Midland, Texas 79702

AMOCO PRODUCTION COMPANY
P. O. Box 3092
Houston, Texas 77002
Attn: Marlin Brown

ANADARKO PRODUCTION COMPANY
Attn: Jim Johnson
P. O. Drawer 2497
Midland, Texas 79702

EXXON COMPANY, U.S.A.
Attn: Marvin Wigley
P. O. Box 1600
Midland, Texas 79701

GALAXY OIL COMPANY
Attn: Jim Rumsey
918 Lamar
Wichita Falls, Texas 76301

GULF OIL CORPORATION
Attn: Scott Wilson
P. O. Drawer 1150
Midland, Texas 79701

READING & BATES
Attn: Denny Whinery
3800 1st Nat'l Tower
Tulsa, OK 74103

YATES PETROLEUM CORPORATION
Attn: Randy Patterson
207 S. Fourth Street
Artesia, New Mexico 88210

R. W. Charlesworth Estate
c/o Clyde Barton, Trustee
P. O. Box 899
Kermit, Texas 79745

CONOCO, Inc.
Attn: Garland Robinson
P. O. Box 1959
Midland, Texas 79702

CORONADO EXPLORATION CORP.
Attn: Harvey E. Yates, Jr.
1007 Marquette, NW
Albuquerque, New Mexico 87102

YATES DRILLING COMPANY
Attn: Randy Patterson
207 S. Fourth Street
Artesia, New Mexico 88210

Joseph S. Sprinkle
P. O. Box 6483
Cherry Creek Station
Denver, Colorado 80206

Frank L. Shogrin
P. O. Box 5752
Denver, Colorado 80217

James L. Harden
Suite 1814 Presidential Plaza
1050 17th Street
Denver, Colorado 80265

Bruce Anderson
600 Southwest Tower
Houston, Texas 77002

Richard L. Peterson
P. O. Box 8
Douglas, Wyoming 82633

W. T. Wynn
1603 West Dengar
Midland, Texas 79701

Martin Yates III
207 South Fourth street
Artesia, New Mexico 88210

John W. Gates
American Home Building
Artesia, New Mexico 88210

Jacqueline Anderson
600 Southwest Tower
Houston, Texas 77002

Blake Oil & Gas
400 North Main
Midland, Texas 79701

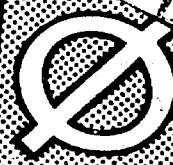
Holly Energy Corporation
2001 Bryan Tower - Suite 2680
Dallas, Texas 75201

Read & Stevens, Inc.
P. O. Box 1518
Roswell, New Mexico 88201

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

Dresser Atlas**DRESSER**

Combination Logging Systems

Compensated **Densilog®**
Compensated **Neutron®**

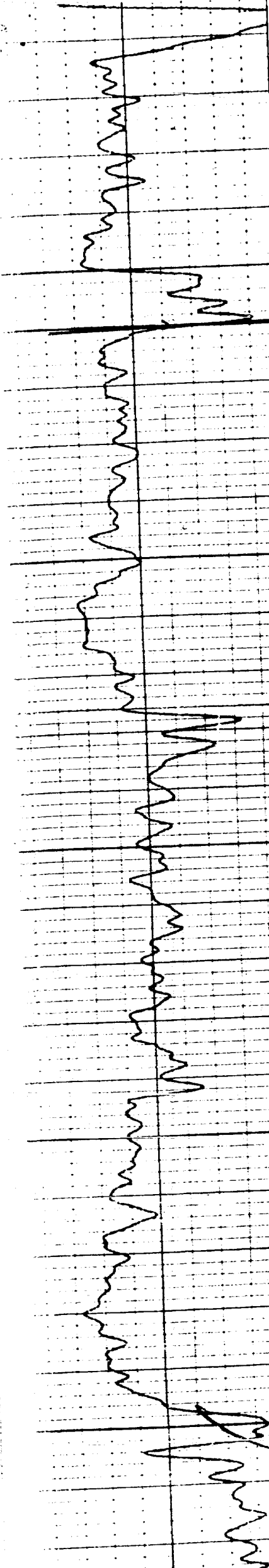
FILE NO.

FIELD
PAINTCOMPANY HARVEY E. YATES CO.WELL YOUNG DEEP UNIT #1FIELD WILDCATCOUNTY LEASTATE NEW MEXICOLOCATION: 660' ENL & FEL

Other Services

DLL/MLL
DIPLOGSEC 10 TWP 18-S RGE 32-EPermanent Datum GROUND LEVEL Elev. 3848.8Log Measured from KB 15 Ft. Above Permanent DatumDrilling Measured from KBElevations:
KB 3863.8
DF
GL 3848.8

Date	4/1/60				
Run No.	ONE				
Service Order	14656				
Depth—Driller	13940				
Depth—Logger	13960				
Bottom Logged Interval	13958				
Top Logged Interval	4450				
Casing—Driller	85/8 @ 4500				
Casing—Logger	4493				
Bit Size	7 7/8				
Type Fluid in Hole	BRINE POLY-KCL				
Density and Viscosity	9.6 38				
pH and Fluid Loss	9.5 5 CC				
Source of Sample	PIT				
Rm @ Meas. Temp.	.140 @ 76 °F	T/BS	6245		
Rmf @ Meas. Temp.	.100 @ 76 °F	2nd BS	9905 °F	@	°F
Rmc @ Meas. Temp.	— @ — °F	3rd BS	8600 °F	@	°F
Source of Rmf and Rmc	M	2nd BS	8650 °F	@	°F
Rm @ BHT	.065 @ 170 °F	3rd BS	9375		
Time Since Circ.	8 HOURS	T/BS	9884 °F	@	°F
Max. Rec. Temp. Deg. F.	170 °F	T/STR	11600		
Equip. No. and Location	6136 HOBBS	T/BS	12230 °F		
Recorded By	FRANKLIN	T/MLL	13276		
Witnessed By	SMITH	T/LWD	13860		
		T/Dev	13976		



08400

B. SP ϕ & OIL

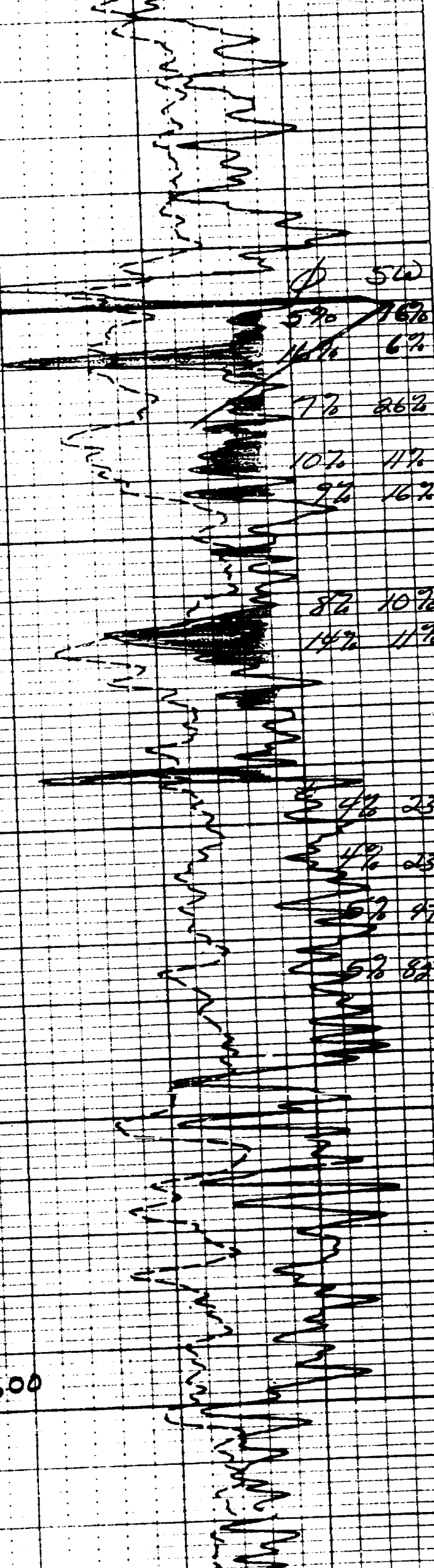
DST #2

R/4428
FO

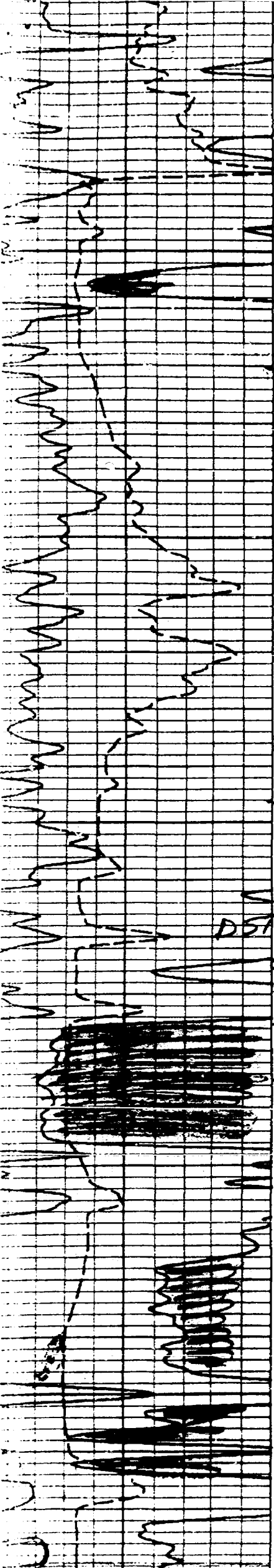
08500

08600

Abo 8600



ϕ	5W
5%	16%
16%	6%
7%	26%
10%	11%
9%	16%
8%	10%
14%	11%
4%	23%
4%	23%
5%	9%
5%	8%



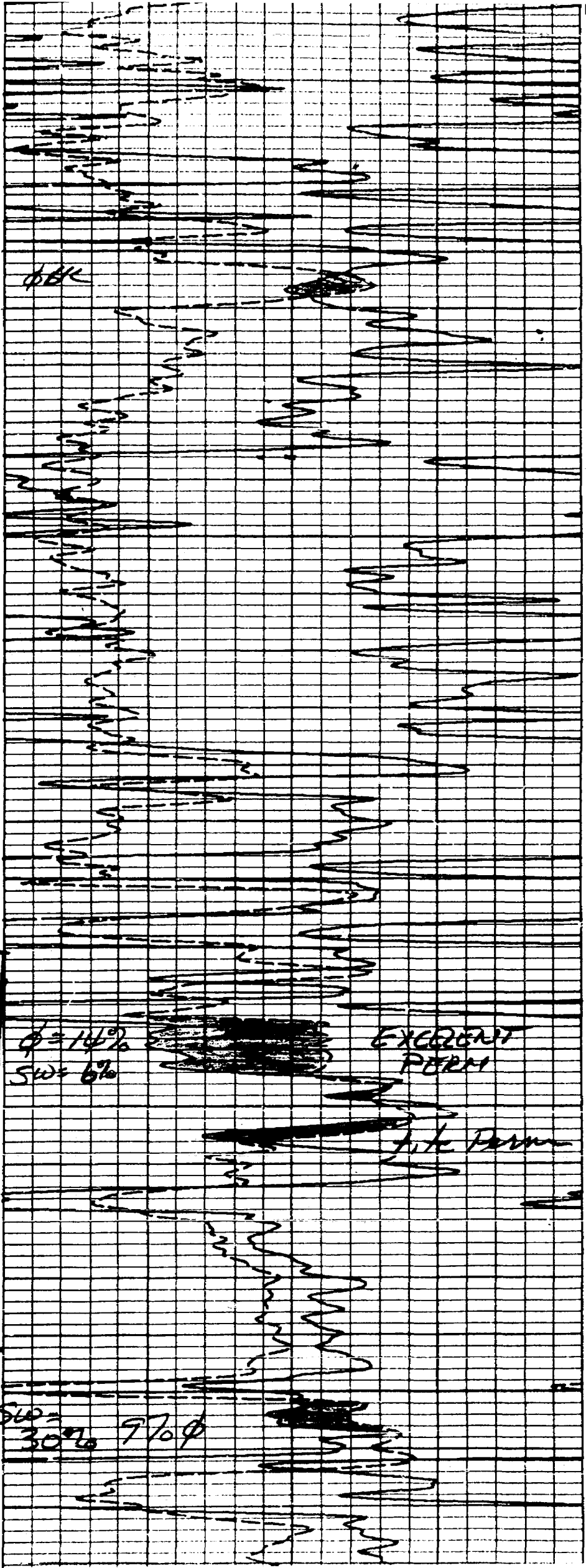
12700

12800

DST #5

GTSQ
13.6MM

12900



$\phi = 14\%$
SW = 6%

EXCELLENT
FORM

Like Form

SW =
30% 9% ϕ

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION

Case 6902
Form C-107
5-1-61
RECEIVED
MAY 06 1960
OIL CONSERVATION DIVISION
SANTA FE

Operator Harvey E. Yates Company		County Lea	Date April 25, 1980
Address P. O. Box 1933, Roswell, N.M. 88201		Lease Young Deep Unit	Well No. 1
Location of Well	Unit D	Section 10	Township 18S
			Range 32E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____; Operator Lease, and Well No.: _____

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Und. Bone Springs		Und. Morrow
b. Top and Bottom of Pay Section (Perforations)	8410' - 8476'		12835' - 12845'
c. Type of production (Oil or Gas)	Oil		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

4. The following are attached. (Please check YES or NO)

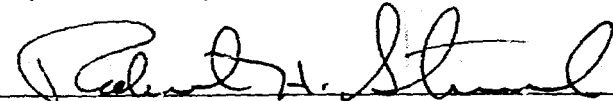
- | | | |
|-------------------------------------|-------------------------------------|---|
| Yes | No | |
| ☒ | ☐ | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| ☒ | ☐ | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease. |
| ☐ | ☒ | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.* |
| ☒ | ☐ | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.) |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

See attached list

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO _____. If answer is yes, give date of such notification April 29, 1980.

CERTIFICATE: I, the undersigned, state that I am the Attorney for Harvey E. Yates Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.


Signature

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

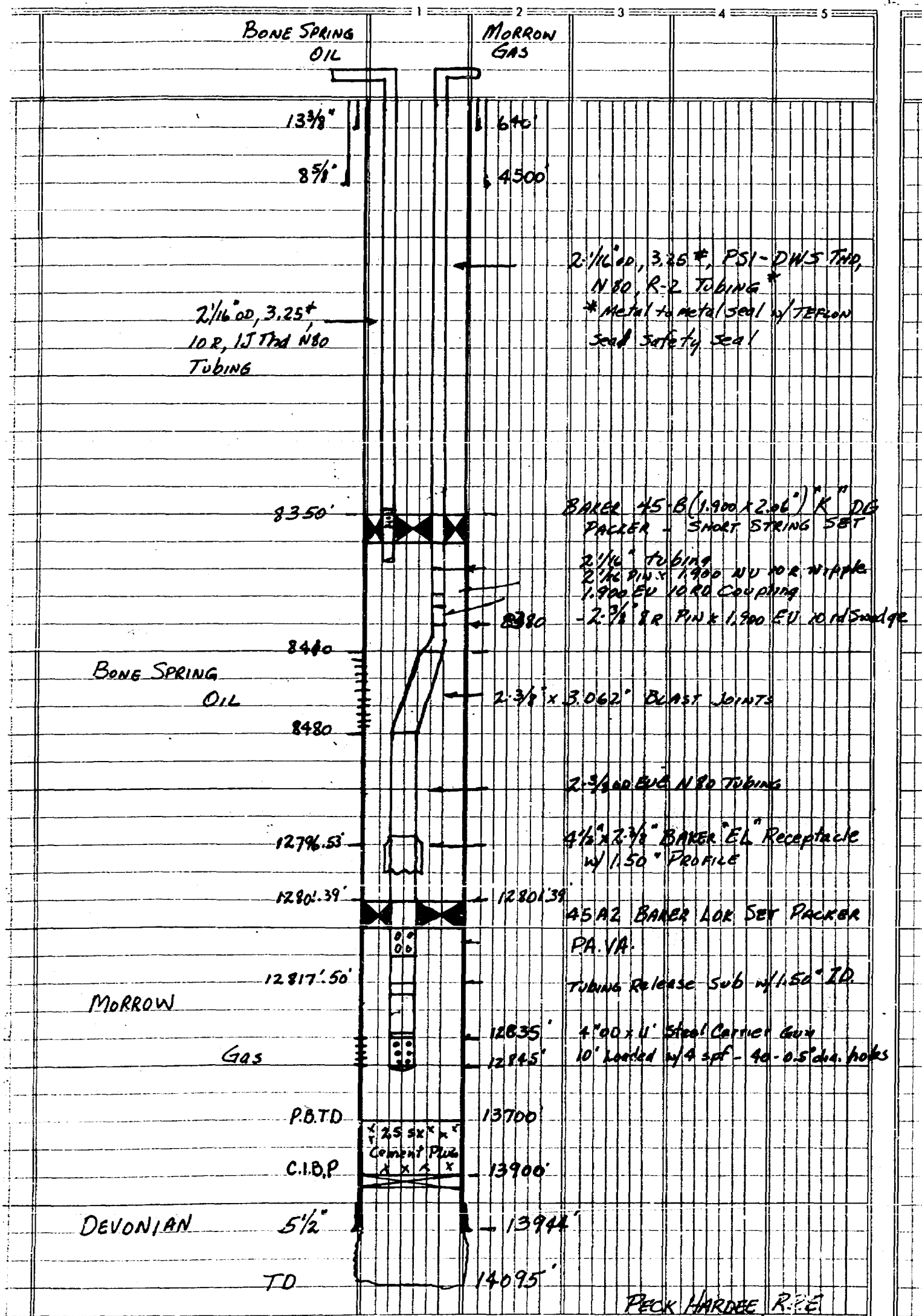
NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

APPLICATION TO DUAL COMPLETE

HARVEY E. YATES, CO.

YOUNG DEEP UNIT WELL No 1
SECTION 10, TWP. 18-S, RGE. 32-E, LEA CO., NEW MEXICO

Prepared By	Initials	Date
Approved By		



YOUNG DEEP UNIT

HARVEY E. YATES COMPANY
P. O. Box 1933
Roswell, New Mexico 88201

MARATHON OIL COMPANY
C & K Petroleum Building
Attn: A. W. Hanley
P. O. Box 552
Midland, Texas 79702

AMOCO PRODUCTION COMPANY
P. O. Box 3092
Houston, Texas 77002
Attn: Marlin Brown

ANADARKO PRODUCTION COMPANY
Attn: Jim Johnson
P. O. Drawer 2497
Midland, Texas 79702

EXXON COMPANY, U.S.A.
Attn: Marvin Wigley
P. O. Box 1600
Midland, Texas 79701

GALAXY OIL COMPANY
Attn: Jim Rumsey
918 Lamar
Wichita Falls, Texas 76301

GULF OIL CORPORATION
Attn: Scott Wilson
P. O. Drawer 1150
Midland, Texas 79701

READING & BATES
Attn: Denny Whinery
3800 1st Nat'l Tower
Tulsa, OK 74103

YATES PETROLEUM CORPORATION
Attn: Randy Patterson
207 S. Fourth Street
Artesia, New Mexico 88210

R. W. Charlesworth Estate
c/o Clyde Barton, Trustee
P. O. Box 899
Kermit, Texas 79745

CONOCO, Inc.
Attn: Garland Robinson
P. O. Box 1959
Midland, Texas 79702

CORONADO EXPLORATION CORP.
Attn: Harvey E. Yates, Jr.
1007 Marquette, NW
Albuquerque, New Mexico 87102

YATES DRILLING COMPANY
Attn: Randy Patterson
207 S. Fourth Street
Artesia, New Mexico 88210

Joseph S. Sprinkle
P. O. Box 6483
Cherry Creek Station
Denver, Colorado 80206

Frank L. Shogrin
P. O. Box 5752
Denver, Colorado 80217

James L. Harden
Suite 1814 Presidential Plaza
1050 17th Street
Denver, Colorado 80265

Bruce Anderson
600 Southwest Tower
Houston, Texas 77002

Richard L. Peterson
P. O. Box 8
Douglas, Wyoming 82633

W. T. Wynn
1603 West Dengar
Midland, Texas 79701

Martin Yates III
207 South Fourth street
Artesia, New Mexico 88210

John W. Gates
American Home Building
Artesia, New Mexico 88210

Jacqueline Anderson
600 Southwest Tower
Houston, Texas 77002

Blake Oil & Gas
400 North Main
Midland, Texas 79701

Holly Energy Corporation
2001 Bryan Tower - Suite 2680
Dallas, Texas 75201

Read & Stevens, Inc.
P. O. Box 1518
Roswell, New Mexico 88201

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978



Combination Logging Systems

DRESSER

Compensated **Densilog®**
Compensated **Neutron®**



FILE NO.

COMPANY HARVEY E. YATES CO.

WELL YOUNG DEEP UNIT #1

FIELD WILDCAT

COUNTY LEA STATE NEW MEXICO

LOCATION: 660' FNL + FEL

Other Services

DLL/MLL
DIPLOG

SEC 10 TWP 18-S RGE 32-E

Permanent Datum GROUND LEVEL Elev. 3848.8

Elevations:
KB 3863.8

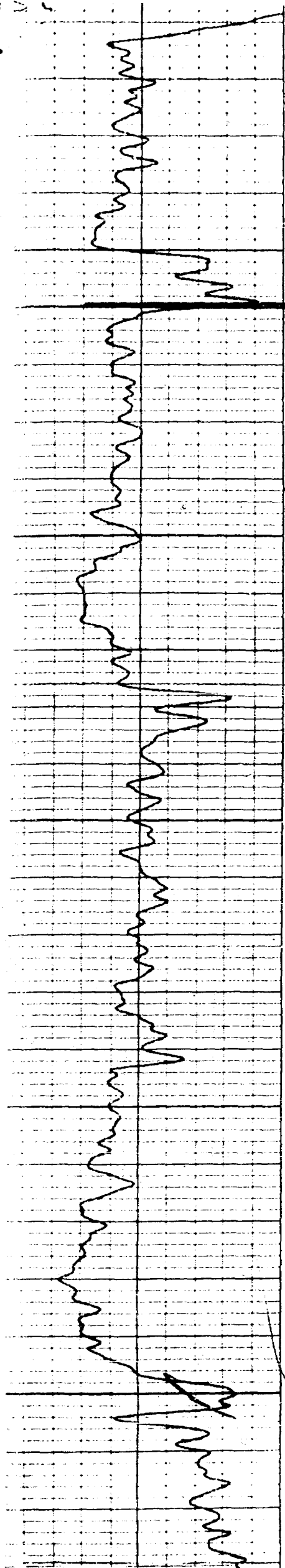
Log Measured from KB 15 Ft. Above Permanent Datum

DF

Drilling Measured from KB

GL 3848.8

Date	<u>4/1/60</u>				
Run No.	<u>ONE</u>				
Service Order	<u>14656</u>				
Depth—Driller	<u>13940</u>				
Depth—Logger	<u>13960</u>				
Bottom Logged Interval	<u>13958</u>				
Top Logged Interval	<u>4450</u>				
Casing—Driller	<u>8 5/8 @ 4500</u>	@		@	
Casing—Logger	<u>4493</u>				
Bit Size	<u>7 7/8</u>				
Type Fluid in Hole	<u>BRINE 10% KCL</u>				
Density and Viscosity	<u>9.6</u> <u>38</u>				
pH and Fluid Loss	<u>9.5</u> <u>5</u> cc				cc
Source of Sample	<u>PIT</u>				
Rm @ Meas. Temp.	<u>.140 @ 76 °F</u>	<u>T/BSP</u>	<u>6245'</u>		
Rml @ Meas. Temp.	<u>.106 @ 76 °F</u>	<u>2nd BSP</u>	<u>8925 °F</u>	@	°F
Rmc @ Meas. Temp.	<u>— @ — °F</u>	<u>7/100</u>	<u>8600 °F</u>	@	°F
Source of Rml and Rmc	<u>M</u> <u>—</u>	<u>2nd BSP</u>	<u>8650 °F</u>	@	°F
Rm @ BHT	<u>.065 @ 170 °F</u>	<u>3rd BSP</u>	<u>9325</u>		
Time Since Circ.	<u>8 HOURS</u>	<u>7/100</u>	<u>9484 °F</u>	@	°F
Max. Rec. Temp. Deg. F.	<u>170 °F</u>	<u>T/SIR</u>	<u>11600</u>		
Equip. No. and Location	<u>6136 HOBAS</u>	<u>T/NO</u>	<u>12230 °F</u>		°F
Recorded By	<u>FRANKLIN</u>	<u>T/MCS</u>	<u>13276</u>		
Witnessed By	<u>S.M.A.</u>	<u>T/WD</u>	<u>13860</u>		
		<u>T/D&V</u>	<u>13976'</u>		



08400

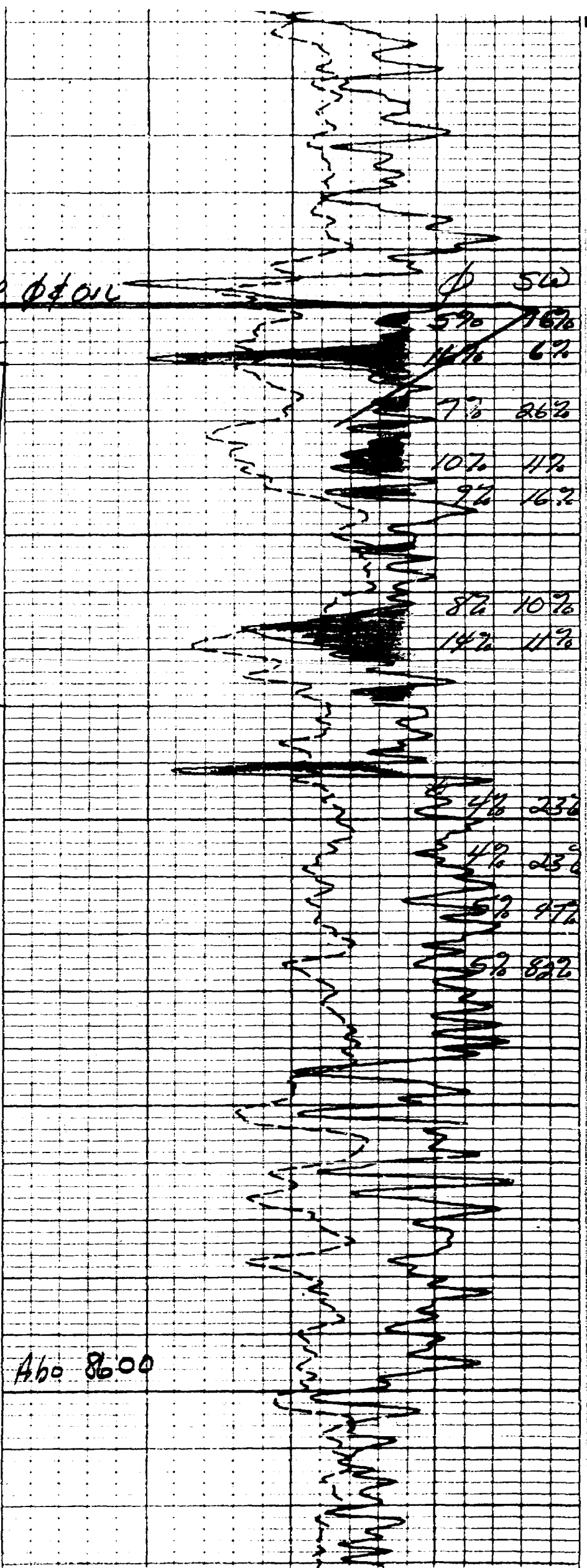
B.SP ϕ OIL

DST#2

R/4428
FO

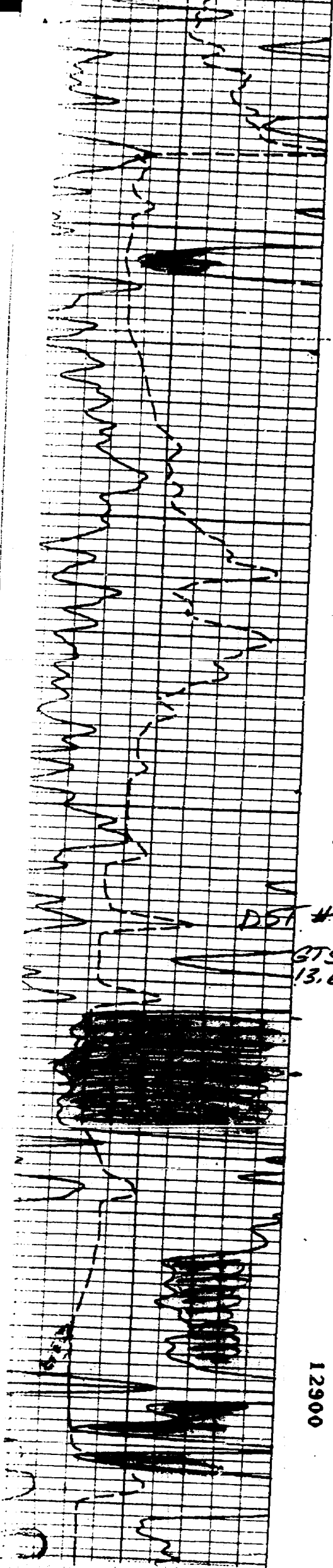
08500

08600



ϕ	50
5%	18%
14%	6%
7%	26%
10%	11%
9%	16%
8%	10%
14%	11%
4%	23%
4%	23%
5%	9%
5%	82%

Abc 8600



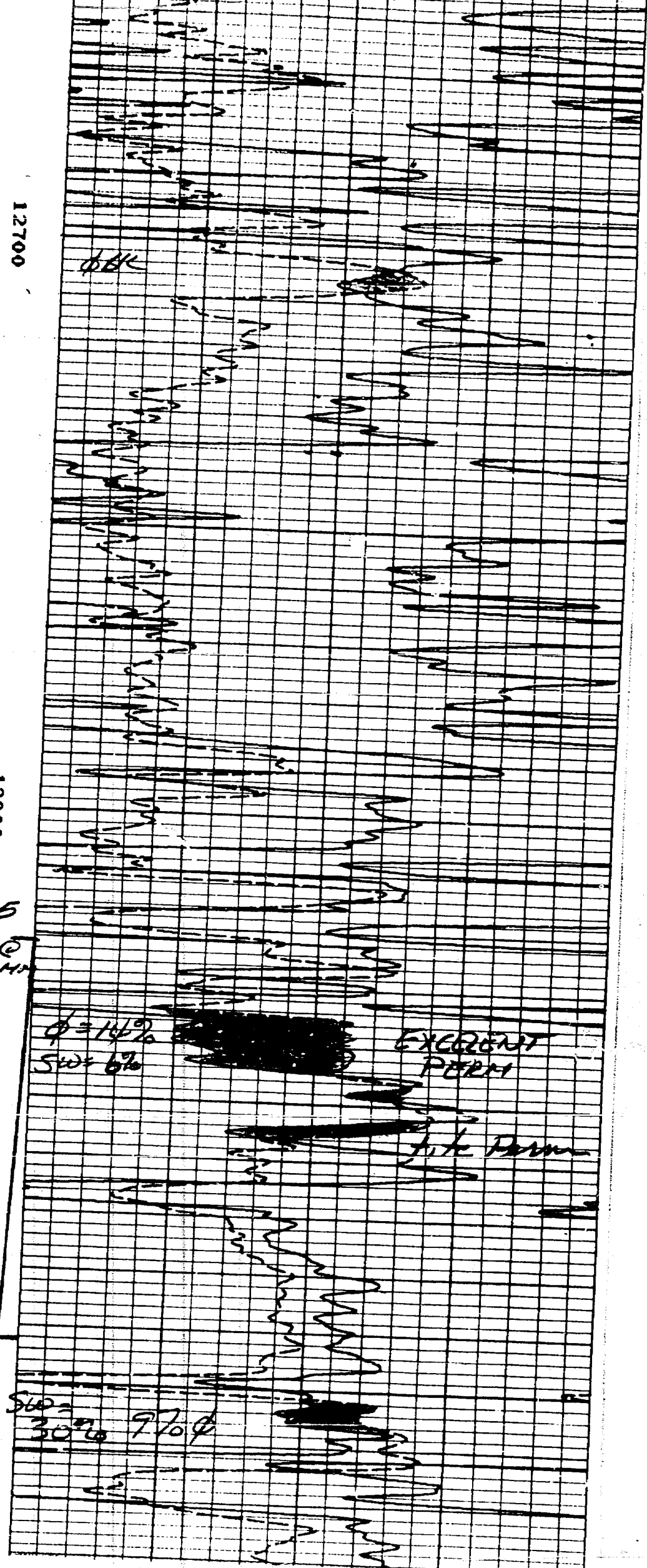
12700

12800

DST #5

GTSQ
13.6MM

12900



φBK

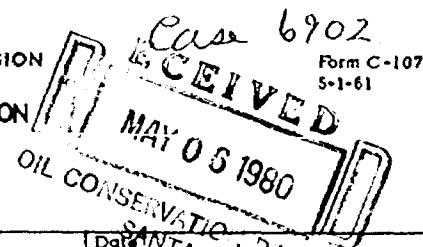
φ = 14%
SW = 6%

EXCERENT
PERM

1.1E Perm

SW = 30%
7% φ

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION



Operator Harvey E. Yates Company		County Lea	Date April 25, 1980
Address P. O. Box 1933, Roswell, N.M. 88201		Lease Young Deep Unit	Well No. 1
Location of Well D	Unit 10	Township 18S	Range 32E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____; Operator Lease, and Well No.: _____

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Und. Bone Springs		Und. Morrow
b. Top and Bottom of Pay Section (Perforations)	8410' - 8476'		12835' - 12845'
c. Type of production (Oil or Gas)	Oil		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

4. The following are attached. (Please check YES or NO)

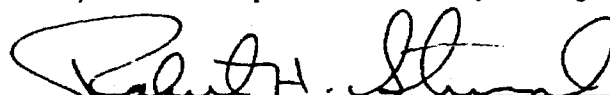
- | | | |
|-------------------------------------|-------------------------------------|---|
| Yes | No | |
| ☒ | ☐ | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| ☒ | ☐ | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease. |
| ☐ | ☒ | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.* |
| ☒ | ☐ | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.) |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

See attached list

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO _____. If answer is yes, give date of such notification April 29, 1980.

CERTIFICATE: I, the undersigned, state that I am the Attorney ~~for~~ for **Harvey E. Yates Company** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.


Signature

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

APPLICATION TO DUAL COMPLETE

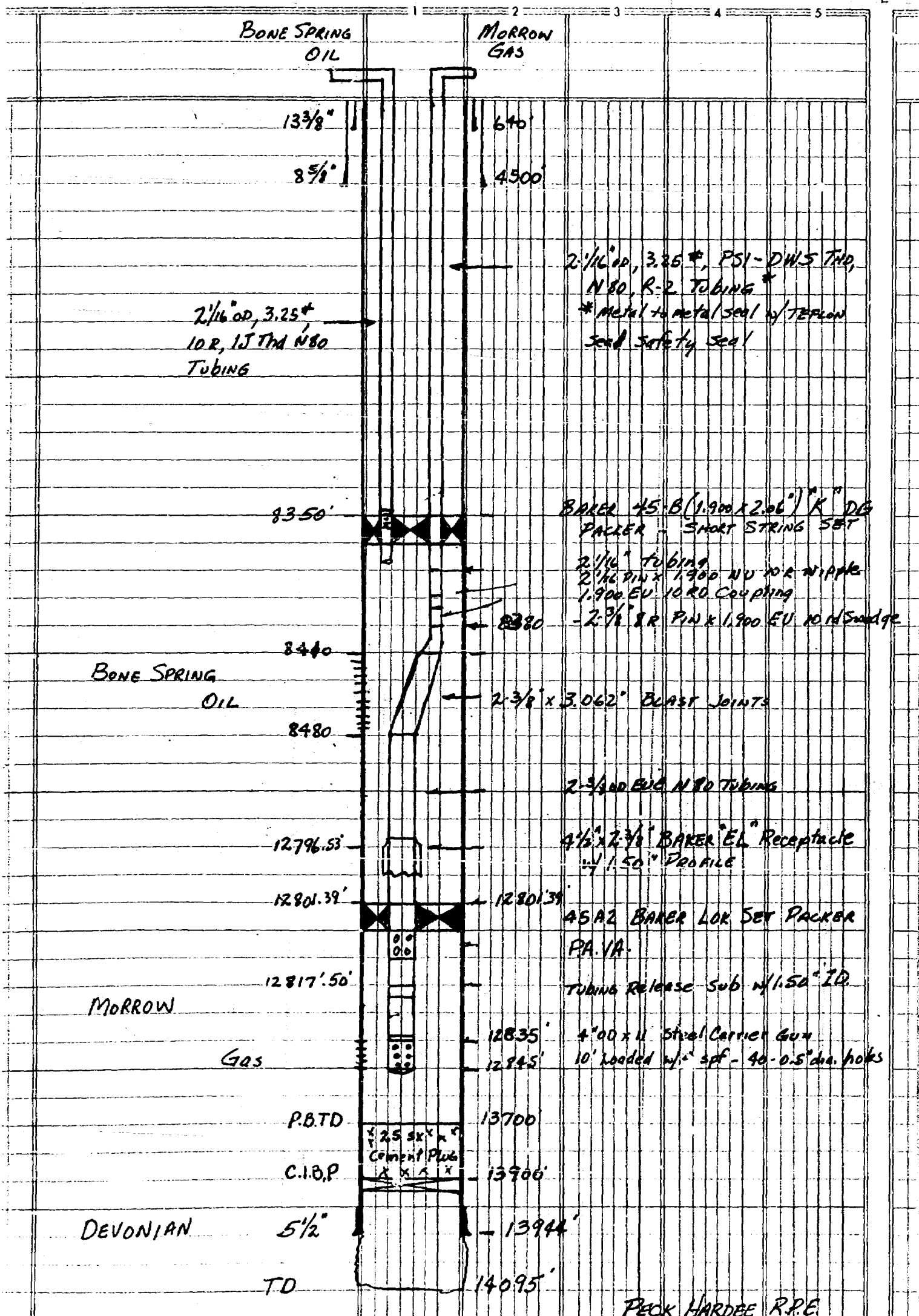
HARVEY E. YATES, CO.

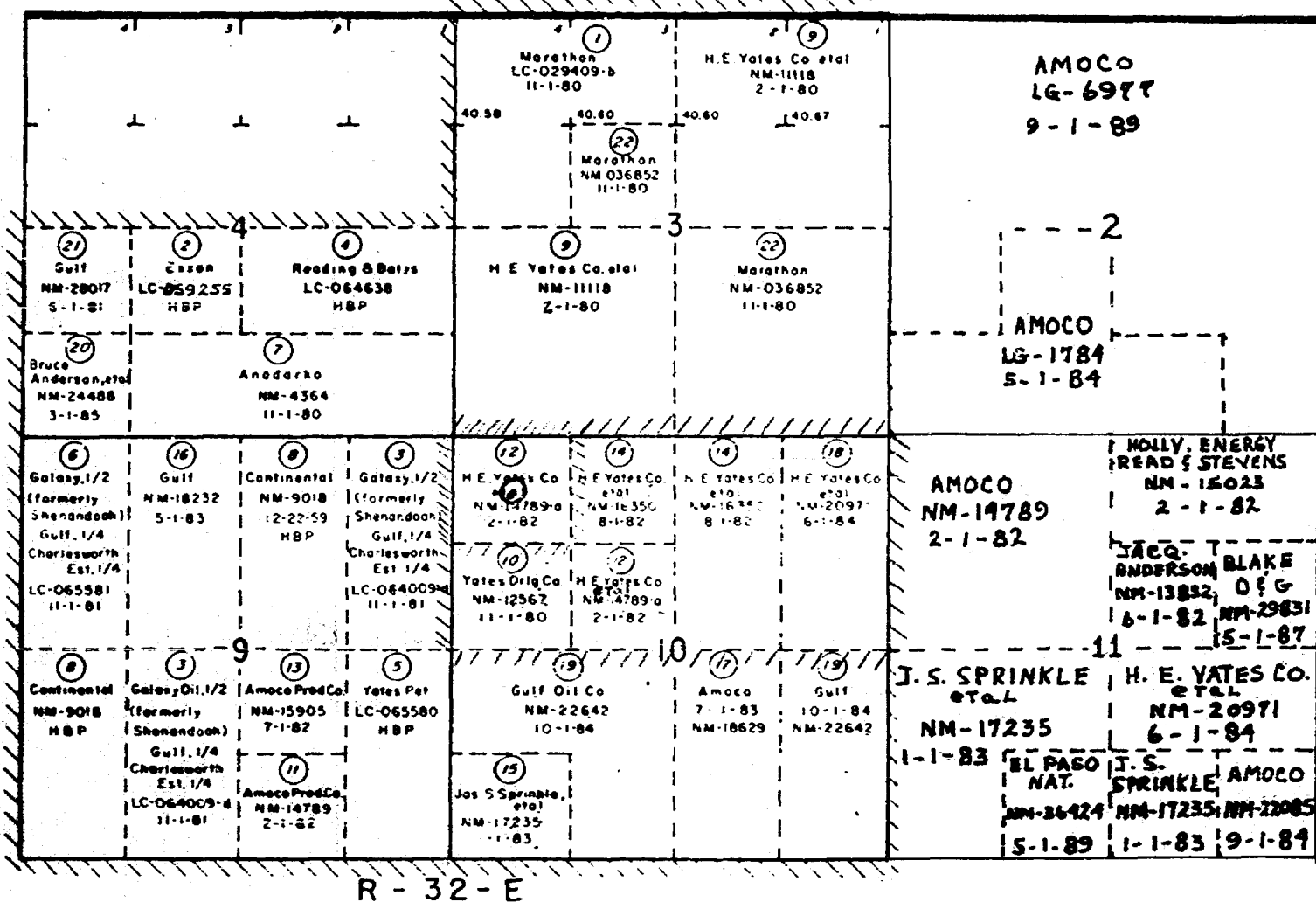
YOUNG DEEP UNIT WELL No 1

SECTION 10, TWP. 18-S, RGE. 32-E, LEA CO., NEW MEXICO

AD-PCA EYE-GLASS
MAY 1984

Prepared By	Initials	Date
Approved By		





- Unit Outline
- Tract Number
- Federal Lands.
2,242.45 ac., 100% of Unit Area
- Scale: 1" = 2000'
- YOUNG DEEP UNIT #1
- PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - MORROW
- PRORATION UNIT ASSIGNED TO YOUNG DEEP UNIT #1 - BONE SPRINGS.

EXHIBIT "A" **YOUNG DEEP UNIT AREA** **LEA COUNTY, NEW MEXICO**

YOUNG DEEP UNIT

HARVEY E. YATES COMPANY
P. O. Box 1933
Roswell, New Mexico 88201

MARATHON OIL COMPANY
C & K Petroleum Building
Attn: A. W. Hanley
P. O. Box 552
Midland, Texas 79702

AMOCO PRODUCTION COMPANY
P. O. Box 3092
Houston, Texas 77002
Attn: Marlin Brown

ANADARKO PRODUCTION COMPANY
Attn: Jim Johnson
P. O. Drawer 2497
Midland, Texas 79702

EXXON COMPANY, U.S.A.
Attn: Marvin Wigley
P. O. Box 1600
Midland, Texas 79701

GALAXY OIL COMPANY
Attn: Jim Rumsey
918 Lamar
Wichita Falls, Texas 76301

GULF OIL CORPORATION
Attn: Scott Wilson
P. O. Drawer 1150
Midland, Texas 79701

READING & BATES
Attn: Denny Whinery
3800 1st Nat'l Tower
Tulsa, OK 74103

YATES PETROLEUM CORPORATION
Attn: Randy Patterson
207 S. Fourth Street
Artesia, New Mexico 88210

R. W. Charlesworth Estate
c/o Clyde Barton, Trustee
P. O. Box 899
Kermit, Texas 79745

CONOCO, Inc.
Attn: Garland Robinson
P. O. Box 1959
Midland, Texas 79702

CORONADO EXPLORATION CORP.
Attn: Harvey E. Yates, Jr.
1007 Marquette, NW
Albuquerque, New Mexico 87102

YATES DRILLING COMPANY
Attn: Randy Patterson
207 S. Fourth Street
Artesia, New Mexico 88210

Joseph S. Sprinkle
P. O. Box 6483
Cherry Creek Station
Denver, Colorado 80206

Frank L. Shogrin
P. O. Box 5752
Denver, Colorado 80217

James L. Harden
Suite 1814 Presidential Plaza
1050 17th Street
Denver, Colorado 80265

Bruce Anderson
600 Southwest Tower
Houston, Texas 77002

Richard L. Peterson
P. O. Box 8
Douglas, Wyoming 82633

W. T. Wynn
1603 West Dengar
Midland, Texas 79701

Martin Yates III
207 South Fourth street
Artesia, New Mexico 88210

John W. Gates
American Home Building
Artesia, New Mexico 88210

Jacqueline Anderson
600 Southwest Tower
Houston, Texas 77002

Blake Oil & Gas
400 North Main
Midland, Texas 79701

Holly Energy Corporation
2001 Bryan Tower - Suite 2680
Dallas, Texas 75201

Read & Stevens, Inc.
P. O. Box 1518
Roswell, New Mexico 88201

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978



Combination Logging Systems

Compensated **Densilog®**
Compensated **Neutron®**



FILE NO. FIELD PRINT

COMPANY HARVEY E. YATES CO.

WELL YOUNG DEEP UNIT #1

FIELD WILDCAT

COUNTY LEA STATE NEW MEXICO

LOCATION: 660' FNL + FEL

SEC 10 TWP 18-S RGE 32-E

Other Services
DLL/MLL
DIPLOG

Permanent Datum GROUND LEVEL Elev. 3848.8

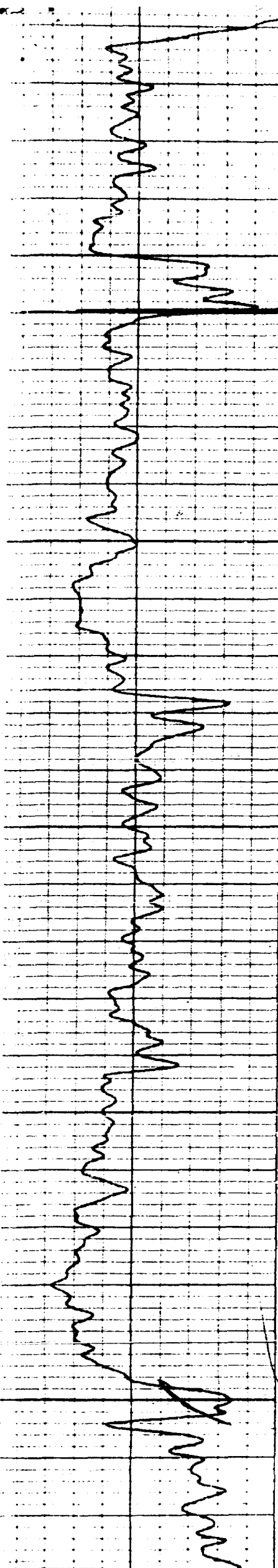
Log Measured from KB 15 Ft. Above Permanent Datum

Drilling Measured from KB

Elevations:
KB 3843.8
DF
GL 3848.8

Date	4/1/80				
Run No.	ONE				
Service Order	14656				
Depth—Driller	13940				
Depth—Logger	13950				
Bottom Logged Interval	1390-8				
Top Logged Interval	4450				
Casing—Driller	8 5/8 @ 4500	@			
Casing—Logger	4493				
Bit Size	7 7/8				
Type Fluid in Hole	BRINE POLY-KCL				
Density and Viscosity	9.6 38				
pH and Fluid Loss	9.5 5 cc				
Source of Sample	PIT				
Rm @ Meas. Temp.	.140 @ 76 °F	T/BSP	6245'		
Rmf @ Meas. Temp.	.100 @ 76 °F	Int. Bnd.	8205 °F	@	°F
Rmc @ Meas. Temp.	— @ — °F	T/BSP	8600 °F	@	°F
Source of Rmf and Rmc	M —	2nd Bnd.	8650 °F	@	°F
Rm @ BHT	.065 @ 170 °F	3rd Bnd.	9325		
Time Since Circ.	8 HOURS	T/WB	9484 °F	@	°F
Max. Rec. Temp. Deg. F.	170 °F	T/SR	11600		
Equip. No. and Location	6136 HOBBS	T/MB	12230 °F		°F
Recorded By	FRANKLIN	T/MCS	13276		
Witnessed By	SMITH	T/WB	13860		
		T/REV	13974		

1085
and Analysis on 5"



084000

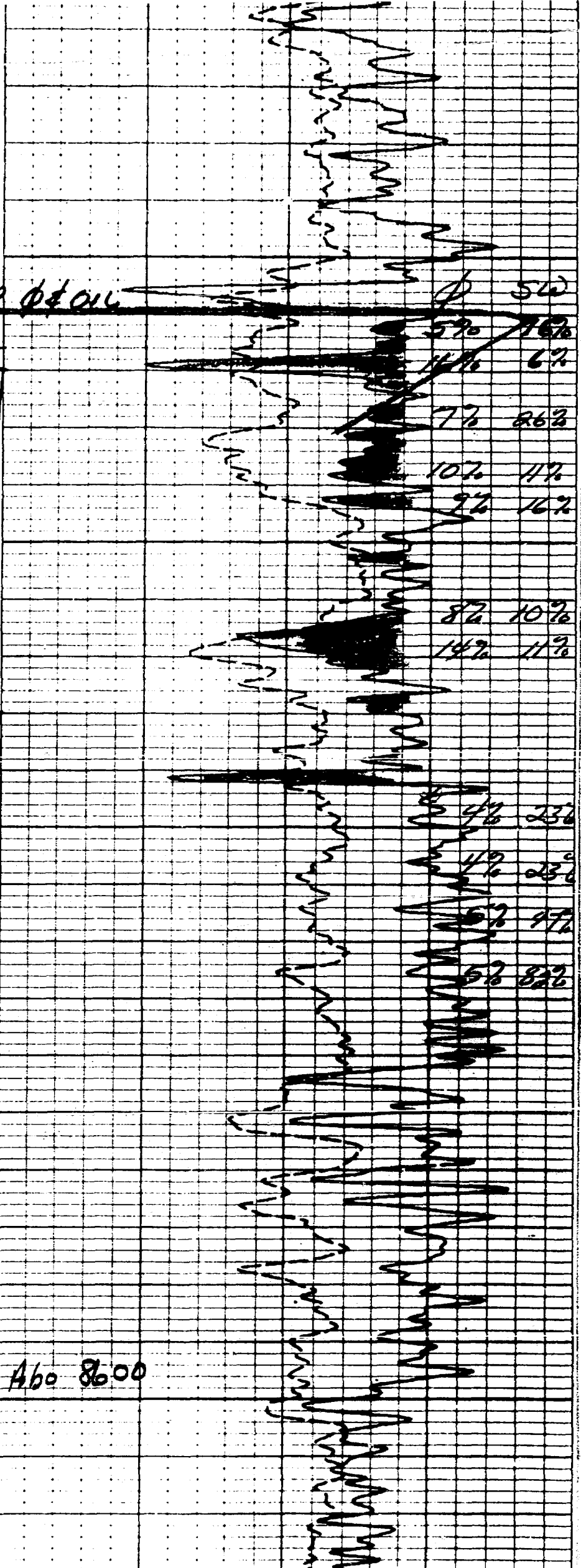
B. SP ϕ 0.14

OST #2

R/4428
FO

08500

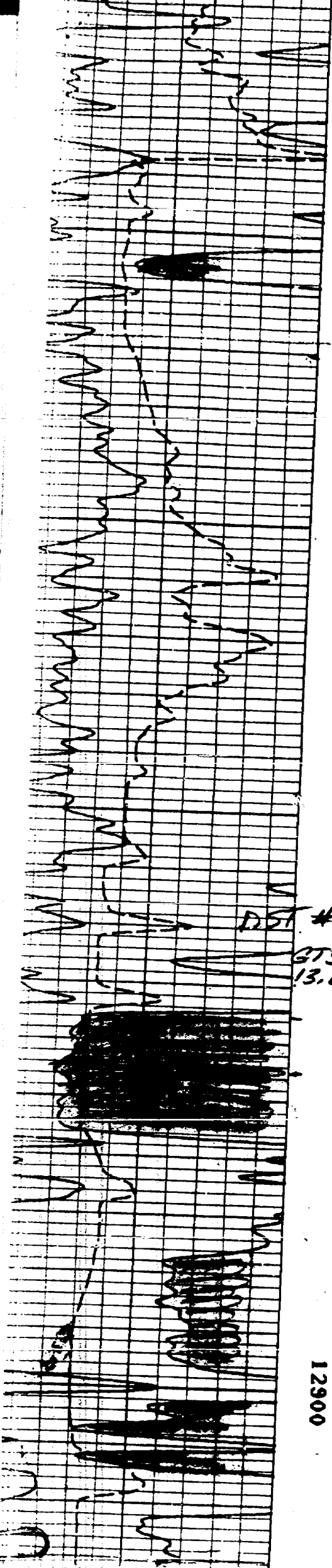
08600



ϕ	50
5%	16%
14%	6%
7%	26%
10%	11%
9%	16%
8%	10%
14%	11%

4%	23%
1%	23%
5%	9%
6%	82%

460 8600

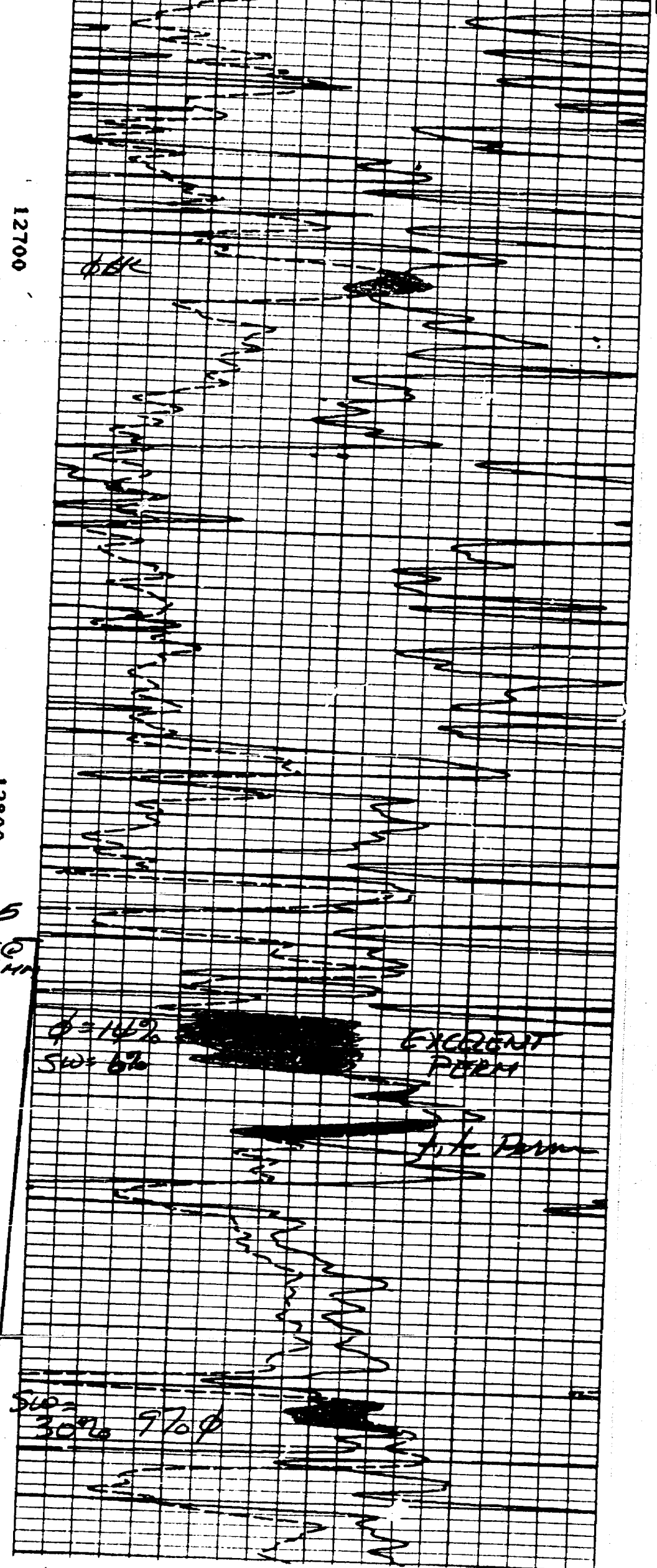


12700

12800

DST #5
GTSD
13.6MM

12900



$\phi = 14\%$
SW = 6%

EXCERENT
PERM

J.K. Perm

SW = 30% 970 ϕ

Memo

From

FLORENE DAVIDSON
ADMINISTRATIVE SECRETARY

To
Called in by Bob Strand
April 28, 1980

Harvey E. Yates Co.

Well Completion

Young Deep Unit #1-D

Section 10- T185-R32E

Lea County

gas from Morrow formation

oil from Bone Springs formation

three parallel strings of tubing

OIL CONSERVATION COMMISSION-SANTA FE

ROUGH

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6902

Order No. R- 6363

APPLICATION OF HARVEY E. YATES COMPANY

FOR A DUAL COMPLETION, LEA

COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 o'clock a.m. on
May 21, 1980, at Santa Fe, New Mexico, before

Examiner _____.

NOW, on this _____ day of May, 1980, the
Division Director, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Division has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Harvey E. Yates Company,
seeks authority to complete its Young Deep Unit Well No. 1
~~Well No. 1~~, located in Unit D of Section 10, Town-
ship 18 South, Range 32 East, NMPM, Lea
County, New Mexico, as a dual completion (conventional) to
~~-(combination)-~~
~~-(tubingless)-~~

produce gas from the Morrow formation and oil from the Bone
Springs formation through parallel strings of tubing with

Separation of the zones by means of a packer.

(3). That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Harvey E. Yates Company, is hereby authorized to complete its Young Deep Unit Well No. 1, located in Unit D of Section 10, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) ~~--(combination)--~~ ~~--(tubingless)--~~

to produce ~~gas from the~~ gas from the Morrow formation ~~and~~ oil from the Bone Springs formation through parallel strings of tubing with

separation of the zones to be achieved by
means of a packer set at approximately 12801 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Division Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take Packer leakage tests upon completion and annually thereafter during the Annual Shut-In Pressure Test Period for ~~gas~~ ^{poor} ~~water~~ ⁱⁿ Southeastern New Mexico ~~pool~~.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.