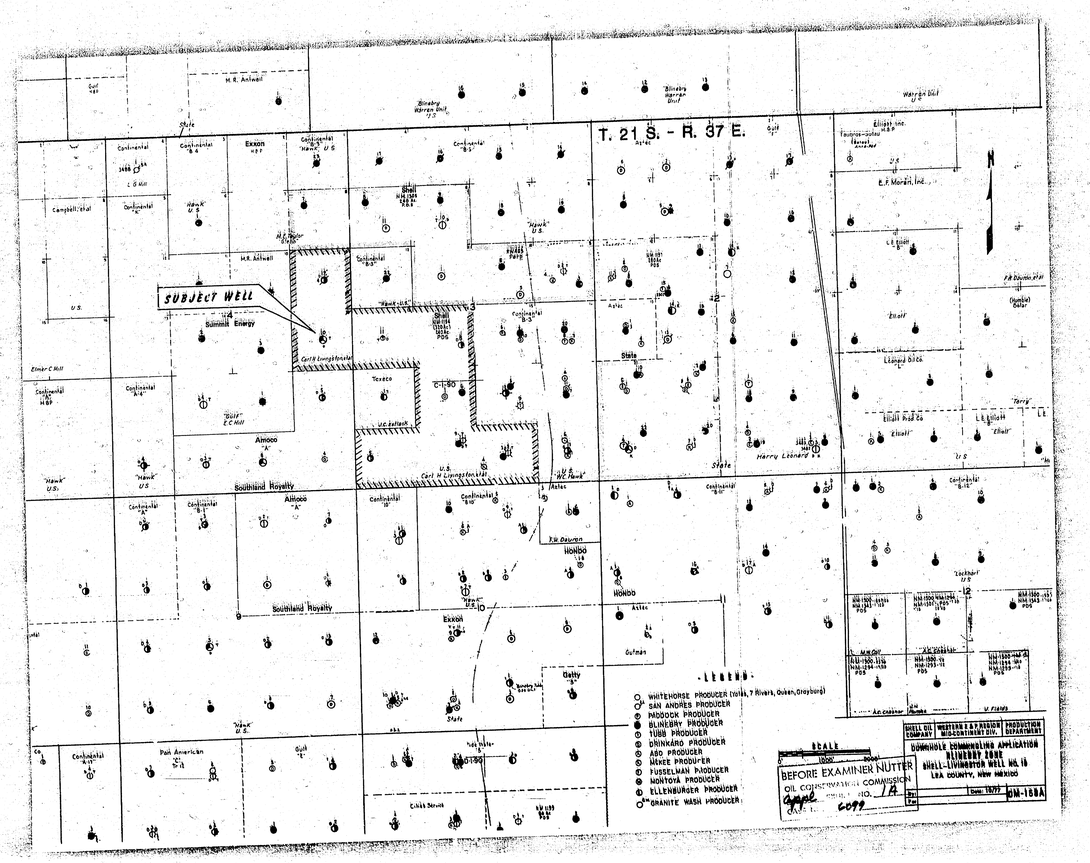
Case No
6099

Large Exhibits

V.R.M.C.F. MICROGRAPHICS
BEST AVAILABLE COPY



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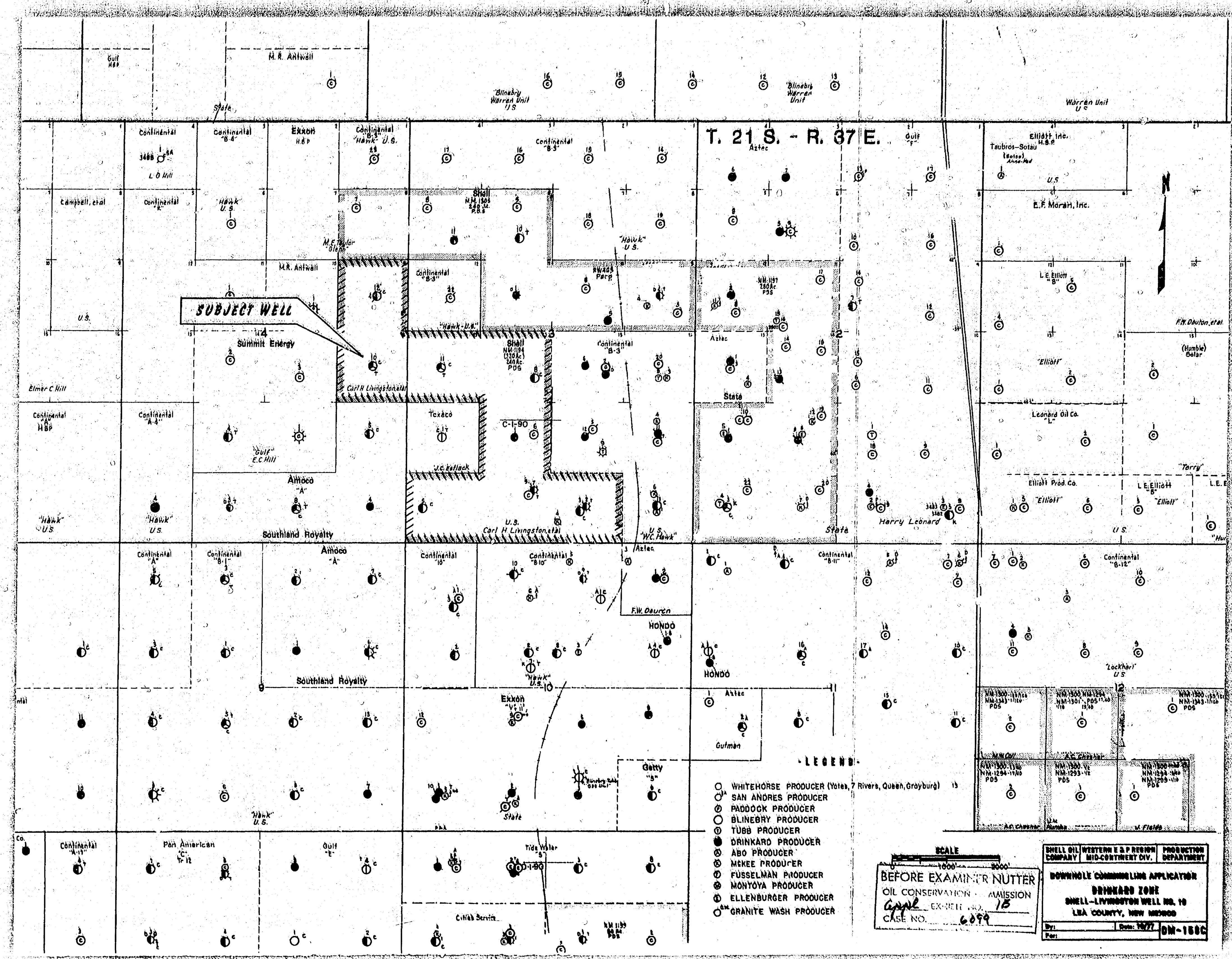

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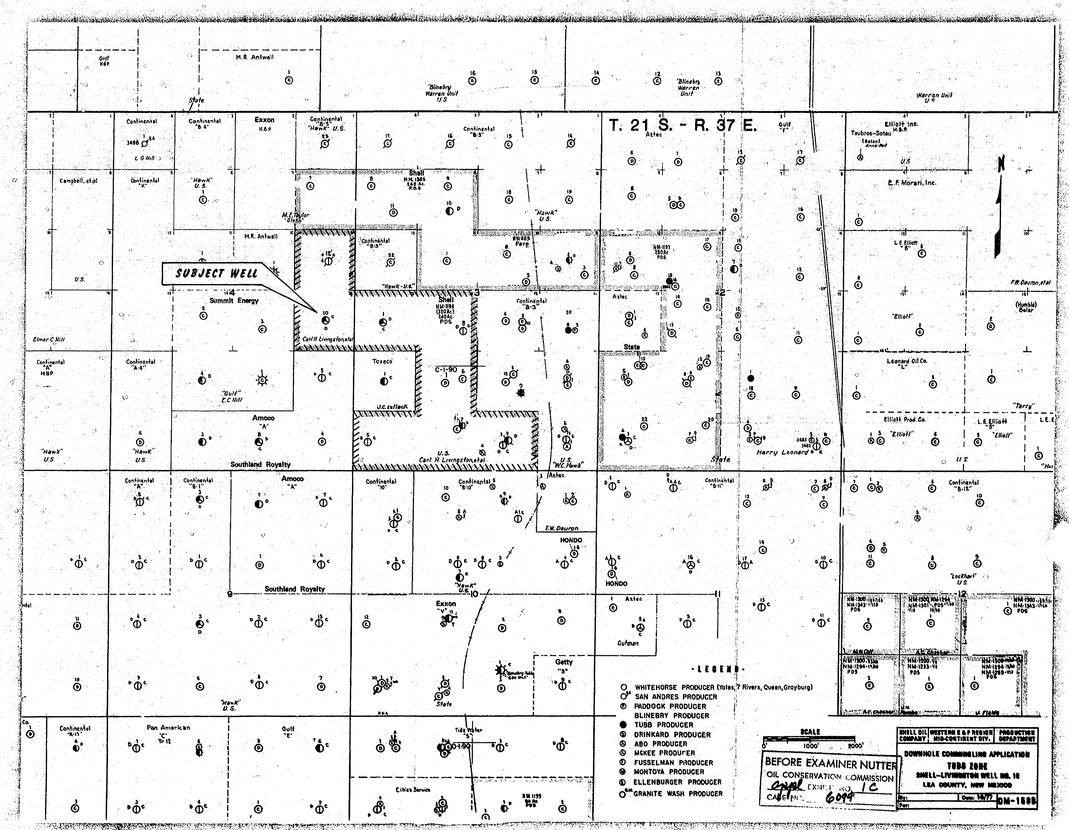

V.R.H.C.P. MICROGRAPHICS
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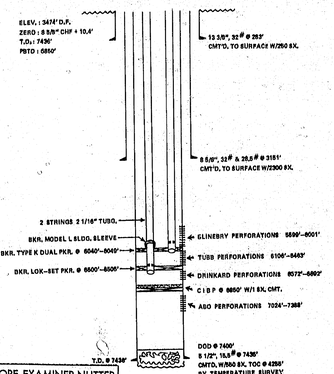
CURRENT DOWNHOLE EQUIPMENT
SHELL-LIVINGSTON No. 10
DOWNHOLE SCHEMATIC



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 2
CASE NO. 6099

ZM-2862 A

V.N.M.C.F. MICROGRAPHICS

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PROPOSED DOWNHOLE EQUIPMENT
SHELL-LIVINGSTON No. 10
DOWNHOLE SCHEMATIC

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Gulf EXHIBIT NO. 3
CASE NO. 6099

ZM–2652 B

V.S.W.C.P. MICROGRAPHICS

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NEW MEXICO OIL CONSERVATION COMMISSION
GAS–OIL RATIO TESTS

C-116
Revised 1-1-65

Operator: Shell Oil Company | Pool: Blinebry-Drinkard | County: Lea

Address: P. O. Box 1509, Midland, TX 79702 | TYPE OF TEST – (X): Scheduled ☐ Completion ☐ Special ☐

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	TYPE OF COMPL (S) or (D)	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	Length of time tested	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS – OIL RATIO CU.FT/BBL.
Livingston	10	P	4	21	37	12-19-76	F	2"	100	10	24	0	36.8	6	589	98,167
COMMINGLED PRODUCTION ALLOCATED																
				Blinebry		12-19-76	F	2"	100	5	24	0	36.8	3		
				Drinkard		12-19-76	F	2"	100	5	24	0	36.8	3		

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 4
CASE NO. 5977

No well will be assigned an allowable greater than the amount of oil produced on the official test;
During gassoil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool to which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowable when authorized by the Commission.
Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.
Report casing pressure in lieu of tubing pressure for any well producing through casing.
Until adopted and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

S. J. Gosnell
(Signature)
Production Superintendent – West
(Title)
11-28-77
(Date)

U.N.M.C.P. MICROGRAPHICS
BEST AVAILABLE COPY

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator: Shell Oil Company | Pool: Tubb | County: Lea

Address: P. O. Box 1509, Midland, Tx 79702 | TYPE OF TEST - (X): Scheduled [ ] Completion [ ] Special [X]

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	TYPE OF TEST (P or S)	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS	GAS MCF	OIL BBLS	GAS MCF.	GAS - OIL RATIO CU.FT/BBL
Livingston	10	P	4	21	37	8-9-77	P	2"	100	-	24	0	38	3	70	23,333

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 4
CASE NO. 6048

We well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool to which well is limited, or the actual producing ability of the well, whichever is less, unless otherwise authorized by the Commission. In order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Until original and one copy of this report in the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

R. J. Carlson
(Signature)
Production Superintendent - West
(Title)
11-28-77
(Date)

V.R.M.C.F. MICROGRAPHICS
BEST AVAILABLE COPY

NEW MEXICO OIL CONSERVATION COMMISSION
GAS–OIL RATIO TESTS

C-116
Revised 1-1-65

Operator: SHELL OIL COMPANY | Pool: TUBB-BLINEBRY-DRINKARD | County: LEA

Address: P. O. BOX 1509, MIDLAND, TEXAS 79702 | TYPE OF TEST – (X) Scheduled ☐ Completion ☐ Special ☒

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	TYPE OF COMPL (S) or (D)	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	Length of Test Hours	PROD. DURING TEST: WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS – OIL RATIO CU.FT/BBL
Livingston	10	P	4	21	37	6-22-77	P	—	35	---	24	1	36.8	35*	867*	24,771

* Oil and gas rates are still declining.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Shell EXHIBIT NO. 6
CASE NO. 6092

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding its top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.65.

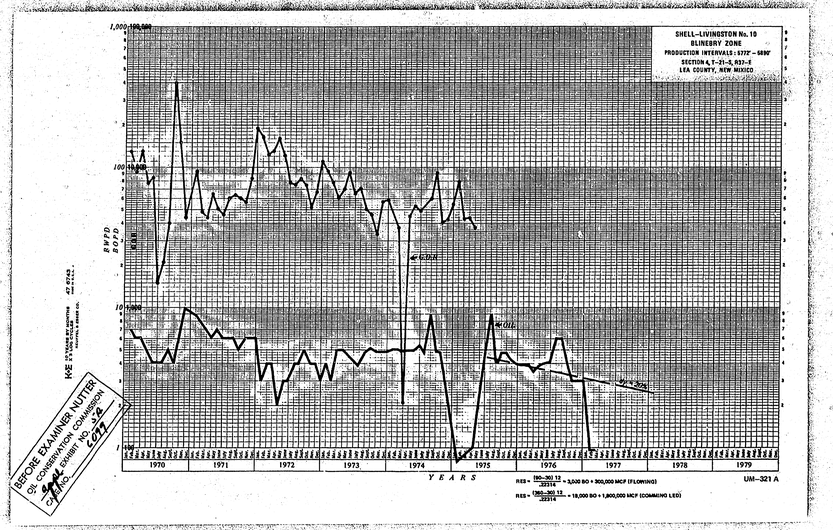
Report casing pressure in lieu of tubing pressure for any well producing through casing.

Until original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

R. J. Cosier
(Signature)
Production Superintendent - West
(Title)
11-28-77
(Date)

W.R.M.C.P. MICROGRAPHICS
BEST AVAILABLE COPY



V.S.N.C.F. PHOTOGRAPHIES
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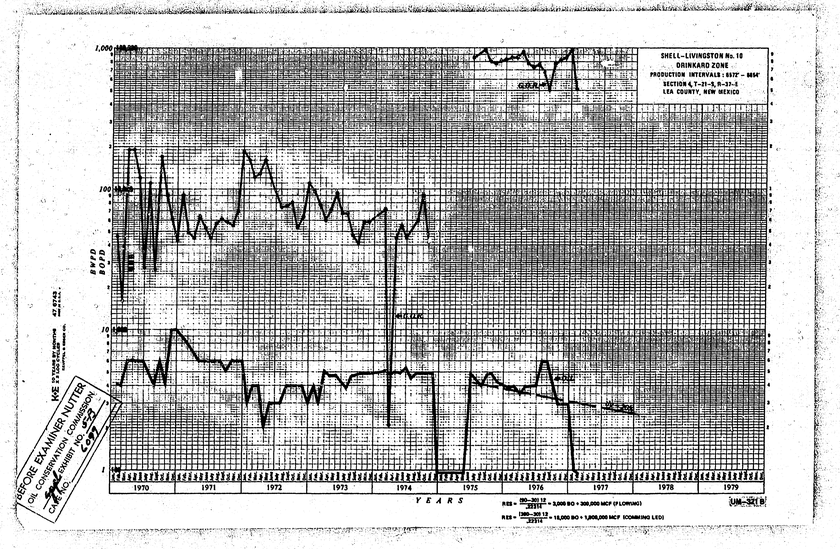

V.S.N.M.G.F. MICROGRAPHICS
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BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
CASE EXHIBIT NO. 32
CASE NO. 6075

SHELL-LIVINGSTON NO. 10
COMMINGLED DRINKARD-BLINEBRY PRODUCTION
LEA COUNTY, NEW MEXICO

	MARCH	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	ANNUAL CUM.
1970											
Drinkard Oil	182	182	183	180	174	154	125	118	164	299	336	2,162
Drinkard Gas	1,661	881	1,835	1,621	5,249	3,643	3,724	4,000	3,925	5,780	4,356	2,669	39,048
Blinebry Oil	282	166	226	183	150	166	154	156	148	191	331	336	2,489
Blinebry Gas	1,209	949	997	925	814	1,173	1,378	1,609	1,443	1,702	197	225	12,621
1971													
Blinebry Oil	332	235	244	197	216	200	214	221	176	181	189	251	2,656
Drinkard Oil	333	235	244	197	215	200	213	222	175	182	188	251	2,655
Total Gas	4,682	2,895	3,135	2,297	2,526	3,474	4,512	3,617	3,176	2,400	4,087	3,768	40,569
1972													
Blinebry Oil	206	177	178	170	191	130	177	156	165	166	121	142	1,979
Drinkard Oil	205	176	179	170	191	130	177	171	165	166	122	142	1,994
Total Gas	2,955	2,426	2,497	2,394	2,748	2,370	3,340	3,019	3,163	3,297	2,282	2,009	32,500
1973													
Blinebry Oil	172	123	171	138	147	110	122	126	155	146	156	119	1,685
Drinkard Oil	172	123	171	142	147	110	122	126	155	146	156	119	1,689
Total Gas	2,580	1,774	3,001	2,389	2,624	1,930	2,037	1,894	1,982	2,116	1,955	2,966	27,248
1974													
Blinebry Oil	141	113	113	155	133	102	112	139	106	106	2	–	1,202
Drinkard Oil	141	113	113	155	113	102	111	139	106	106	2	–	1,181
Total Gas	2,256	2,244	2,791	1,429	2,363	1,911	2,021	2,027	1,357	3,423	4,365	24,523	50,753
1975													
Blinebry Oil	–	1	–	5	–	55	93	83	87	91	89	89	593
Drinkard Oil	–	1	–	5	–	55	93	83	87	91	89	89	593
Total Gas	25,934	21,128	24,679	20,062	27,982	12,302	27,232	23,501	22,899	21,747	20,708	19,329	266,961
1976													
Blinebry Oil	91	73	71	70	73	74	71	139	94	103	89	83	1,031
Drinkard Oil	91	73	71	70	73	74	71	139	94	103	89	83	1,031
Total Gas	21,608	18,306	17,856	18,104	18,272	19,220	17,409	19,023	20,244	17,332	14,810	11,962	214,154
1977													
Blinebry Oil	12	–	–	52									
Drinkard Oil	12	–	–	52									
Total Gas	1,176	5,575	–	2,964									

Total Cumulative Production:
Oil – 51,509
Gas –568,441

N.M.O.C.D. MICROGRAPHICS
BEST AVAILABLE COPY

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator: Shell Oil Company | Pool: Tubb | County: Lea

Address: P. O. Box 1509, Midland, Texas 79702 | Scheduled ☐ | Completion ☐ | Special ☒

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	TYPE OF TEST - (X)	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	Length of test hours	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS - OIL RATIO CU.FT/BBL.
Livingston	11	M	3	21S	37E	4/30/77	P	2"	80	31	24	0	35.4	3.75	170	45,333

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 6
CASE NO. 6077

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio tests, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.65.

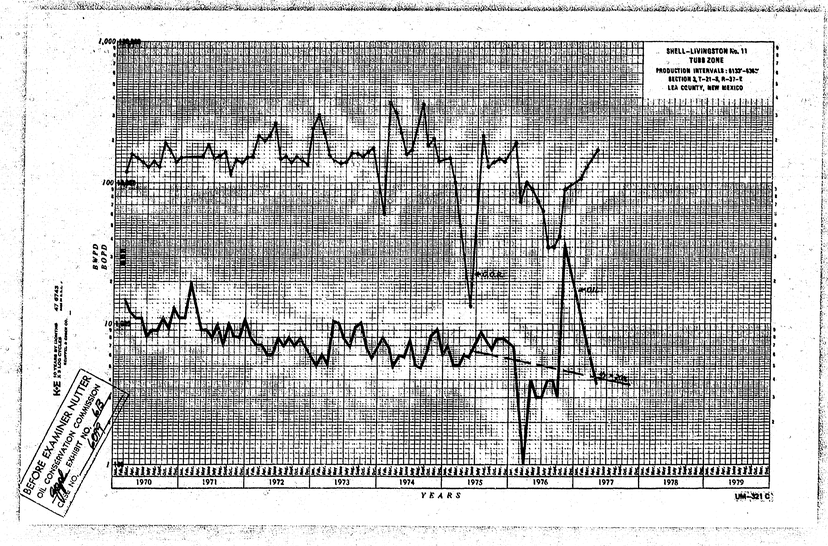
Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

R. J. Coleman
(Signature)
Production Superintendent - West
(Title)
11-26-77
(Date)

W.R.C.F. MICROGRAPHICS
BEST AVAILABLE COPY



U.S.D.A.C.P. MICROGRAPHICS
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BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
CASE NO. 6077 EXHIBIT NO. 6C

SHELL-LIVINGSTON NO. 11
TUBB PRODUCTION
LEA COUNTY, NEW MEXICO

		JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	ANNUAL CUMM.
1966	Oil	573	498	578	562	595	475	447	422	408	468	478	454	5,958
	Gas	5,577	5,358	6,557	7,615	7,212	6,021	6,215	5,477	6,243	6,553	4,961	4,125	71,914
1967	Oil	449	355	405	464	486	404	450	460	425	403	352	386	5,039
	Gas	5,092	4,215	3,574	6,000	4,106	4,177	8,649	3,167	9,789	9,437	3,351	2,492	70,049
1968	Oil	405	387	460	413	424	400	397	391	349	383	403	413	4,825
	Gas	5,763	4,384	4,992	4,755	5,034	4,918	4,379	4,346	3,626	3,452	3,060	2,964	52,073
1969	Oil	373	293	357	373	291	332	347	389	424	400	402	402	4,383
	Gas	2,678	2,334	3,171	3,472	2,854	3,735	6,983	7,130	9,426	6,583	7,505	8,241	64,062
1970	Oil	459	317	421	367	360	262	307	281	295	337	331	437	4,174
	Gas	7,974	6,582	7,506	7,496	7,930	3,890	5,084	5,340	5,326	5,531	6,510	7,360	76,529
1971	Oil	342	265	337	253	184	258	275	253	320	332	282	337	3,443
	Gas	4,688	4,257	5,280	4,470	3,176	4,807	5,568	4,807	6,603	5,702	8,116	7,956	65,530
1972	Oil	299	229	267	256	287	270	266	258	240	248	244	250	3,114
	Gas	5,076	3,406	4,179	4,087	5,016	4,071	4,090	3,993	3,945	4,338	3,900	4,551	50,652
1973	Oil	186	200	206	285	264	220	182	220	249	234	218	166	2,630
	Gas	3,847	3,912	5,088	6,602	6,269	4,873	4,170	4,482	4,385	3,789	2,609	3,319	53,345
1974	Oil	165	158	158	217	158	143	157	194	148	140	112	157	1,907
	Gas	5,170	4,842	5,634	3,934	4,095	4,493	4,402	3,648	3,181	3,838	3,401	4,596	57,134
1975	Oil	131	127	142	133	131	119	131	117	121	126	125	124	1,527
	Gas	7,688	2,848	1,612	656	834	309	259	5,692	3,006	2,699	3,166	2,953	31,722
1976	Oil	107	102	100	98	102	103	100	83	69	978	866	886	3,574
	Gas	-	2,017	592	601	339	729	551	411	411	9,454	8,094	6,948	30,147
1977	Oil	643	324	361	351	85	341	345	302					
	Gas	8,488	3,643	4,783	4,216	8,186	7,536	4,365	4,287					

Total Cummulative Production Oil 84,693
Gas 901,690

W.R.H.C.P. MICROGRAPHICS
BEST AVAILABLE COPY

WR-3329
(REV. 2-73)(5M)

File 12-A

2- Santa Fe
1- G. Hunt, Hobbs
1- D.J. Read

SHELL OIL COMPANY
SUBSURFACE PRESSURE SURVEY

Company Shell Oil Company
Lease Livingston Well No. 10
Field Eumont Date Rec'd 2/15/57
Test Date 2/12-13/57

Producing Formation Drinkard
Elevation (GR, DF, KB, etc.) GL
Datum -3400' subsea, or
Tubing Connection at 6420 SN 6421
Production Packer at 6420 AD-1
Perforations

Instrument Data

Company Running Survey Shell Oil Company
Element—Range & No. Amerada - 52182
Clock — Range & No. Amerada - 29740
Calibration Date 2/14/57

Static Pressure Data

Test Depth 6450 ft
Pressure at Datum (____) 925 psig
Shut-in Time 120 hrs
Pi at Datum ____ psig
Shut-in Tubing Pressure 955 psig
Shut-in Casing Pressure 340 psig
Top of Oil ____
Top of Water ____
Temperature at ____ feet ____ °F
Date of Last Test Unknown
Pressure @ Datum, Last Test ____ psig
Shut-in Time, Last Test ____

Flow Test Data

Test Date 2/12/57
Choke Size 21 in
Period of Stabilized Flow Stabilized ✓ hrs
Stabilized Production(s)
Oil ____ } bbls/day
Gas ____ } MCF/day
Water ____ } bbls/day
Flowing Tubing Pressure 20 psig
Flowing Casing Pressure ____ psig
Cumulative Production (Q)
Oil ____ bbls
Gas ____ MCF
Water ____ bbls
Effect. Prod. Life, t=24 Q/q ____ hrs

Remarks: Well would not flow. Swabbed 2 hrs and is flowing good for the 21".

OPERATOR D. J. Read

Depth ft	Time	Pressure psig	Δp	State Test Δp	State Test Gradient
0	120 hrs	925			
6450	↓	913	558	435	.067
6900		938	92	410	.912

Depth ft	Time	Pressure @ datum	Build-up test Δt hrs	Build-up test t/Δt + 1	Tubing Press.	Casing Press.	Height of Fluid
0		340			20	—	Surface
100		+					
200		+					
300		340					
400		+					
500		340					
600		+					
700		340					
800		+					
900		340					
1000		+					
1100		340					
1200		+					
1300		340					
1400		+					
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2700		340					
2800		+					
2900		340					
3000		+					
3100		340					
3200		+					
3300		340					
3400		+					
3500		340					
3600		+					
3700		340					
3800		+					
3900		340					
4000		+					
4100		340					
4200		+					
4300		340					
4400		+					
4500		340					
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5700		340					
5800		+					
5900		340					
6000		+					
6100		340					
6200		+					
6300		340					
6400		+					
6420	SN	340					
6421	AD-1	340					
6450					955	340	—

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 10
CASE NO. 6077

W.R.M.C.P. MICROGRAPHICS
BEST AVAILABLE COPY

Form 9-329-A (Rev. 2/52)
Amended 8-8-52

File 12-A
5-Oil Cons Div Hobbs
1-Cy Jones Hobbs
1-D.J. Read

SHELL OIL COMPANY

Subsurface Pressure Survey

Producing Formation: Yates
Elevation (GW, DF, KB, etc.): [ ] ft
Datum: subsea, or [ ] ft
Tubing Obstruction at: 2½" tbg @ 2 6068'
Production Packer at:
Perforations:

Company: Shell Oil Company
Lease: Agnes Fee — Well No. 10
Field: Wildcat — State: New Mexico
Test Date: 2-8-11-77

Instrument Data

Company Running Survey: Shell Oil Company
Element - Range & No.: 32m4 - 5268A
Clock - Range & No.: 72hr - 10278
Calibration Date: 4-7-77

Static Pressure Data

Pressure at 6000 [ ]: 1814 psig
Shut-in Time [ ]: 70.83 hrs
P_s at Datum: — psig
Shut-in Tubing Pressure: 1525 psig
Shut-in Casing Pressure: 350 psig
Top of Oil: 2000'±
Top of Water:
Temperature at ___ feet: — °F
Date of Last Test: 11-14-77
Pressure @ 6000' Last Test: 1733 psig
Shut-in Time, Last Test: 72.25 hrs

Flow Test Data

Choke Size: — in
Period of Stabilized Flow: — hrs
Stabilized Production (q)
Oil: — bbls/day
Gas: — MCF/day
Water: — bbls/day
Flowing Tubing Pressure: — psig
Flowing Casing Pressure: — psig
Cumulative Production (Q)
Oil: — bbls
Gas: — MCF
Water: — bbls
Effect. Prod. Time, t = Hrs Q/q: — hrs

Depth D	Time	Press., P, psig	ΔP	Static Test Δp	Gradient
0	70.83hr	525			
5900	↓	1782	1257	5900	.213
6000	↓	1814	32	100	.32

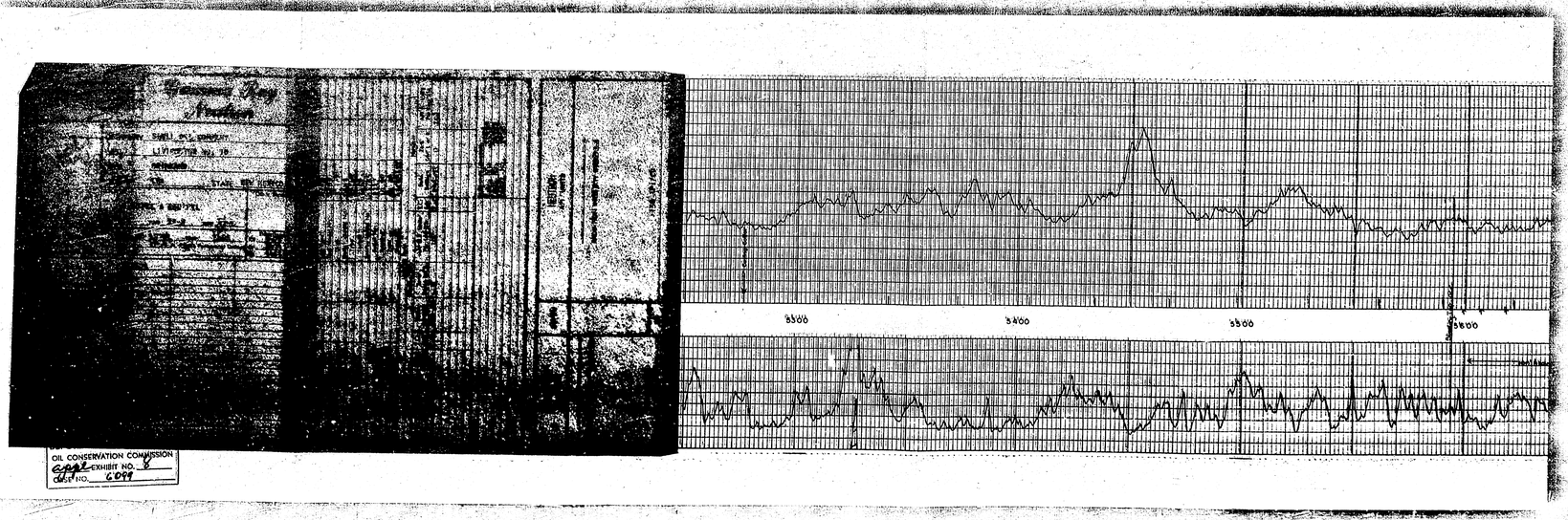
Time	Press. 6000'	Build-up Test Δt hrs	Δt / Δt + 1	Tubing Press.	Casing Press.	Height of Fluid
0	1141			0		
.083	1165					
.166	1177					
.25	1207					
.333	1221					
.421	1267					
.666	1273					
.833	1296					
1.0	1318					
1.5	1367					
2	1397					
3	1453					
4	1483					
5	1614					
6	1587					
7	1627					
19	1627					
21	1628					
24	1715					
48	1727					
24	1734					
72	1720 est					
48	1728					
24	1725					
10	1723					
62	1823					
70.83	1814			525	350	2000' est

DEC 30 1977
RECEIVED
OIL CONSERVATION DIV.
HOBBS, OFFICE

Remarks: Well unable to flow. Swabbed well down prior to buildup. Last swab run made 30 minutes before bomb on bottom for 5.5. # Steel of buildup. Used 1/16 with swabbed back 52 BW in 3 hrs. 45 min.

Operator: D.J. Read

V.R.N.C.F. MICROGRAPHICS
BEST AVAILABLE COPY



OIL CONSERVATION COMMISSION
EXHIBIT NO. 8
CASE NO. 6099

N.M.M.C.P. MICROGRAPHICS
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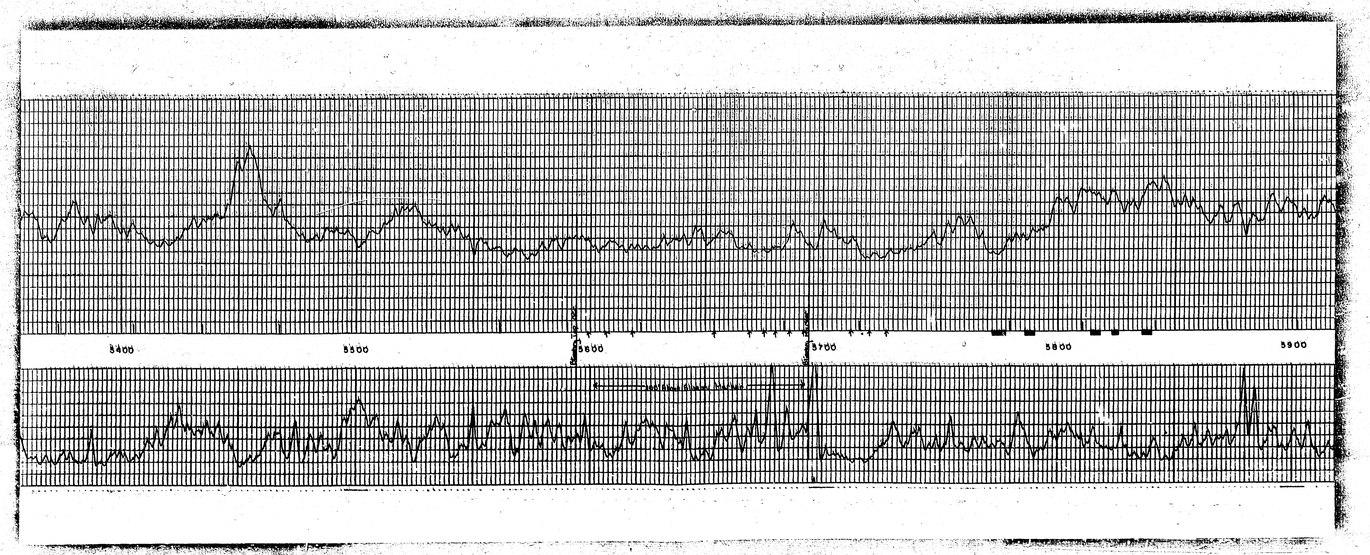

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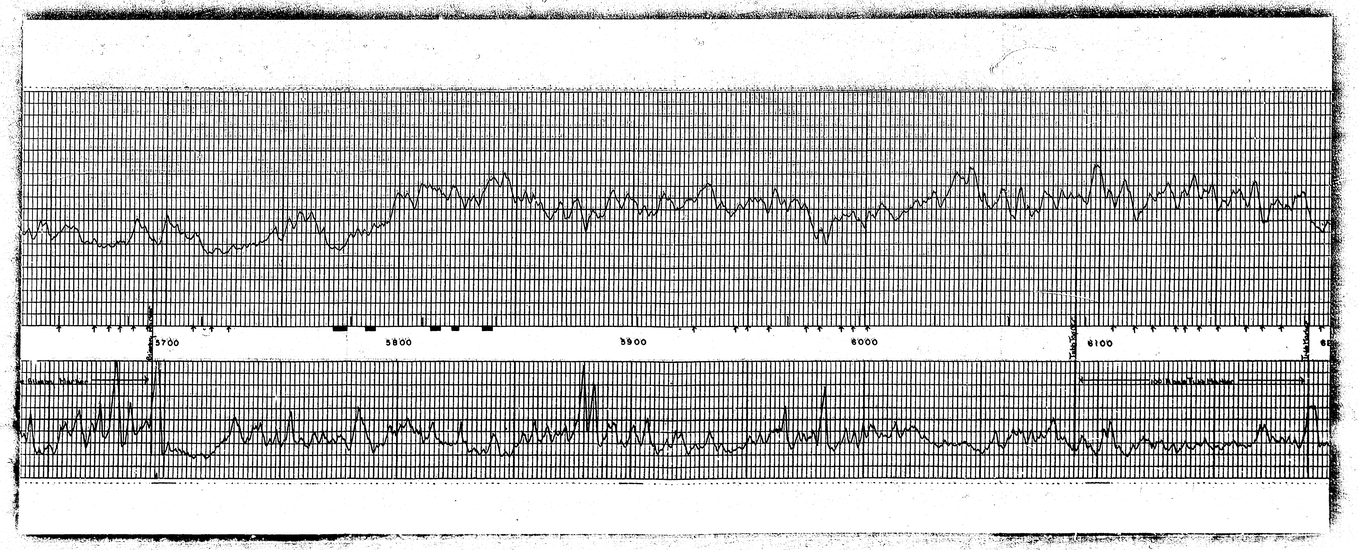

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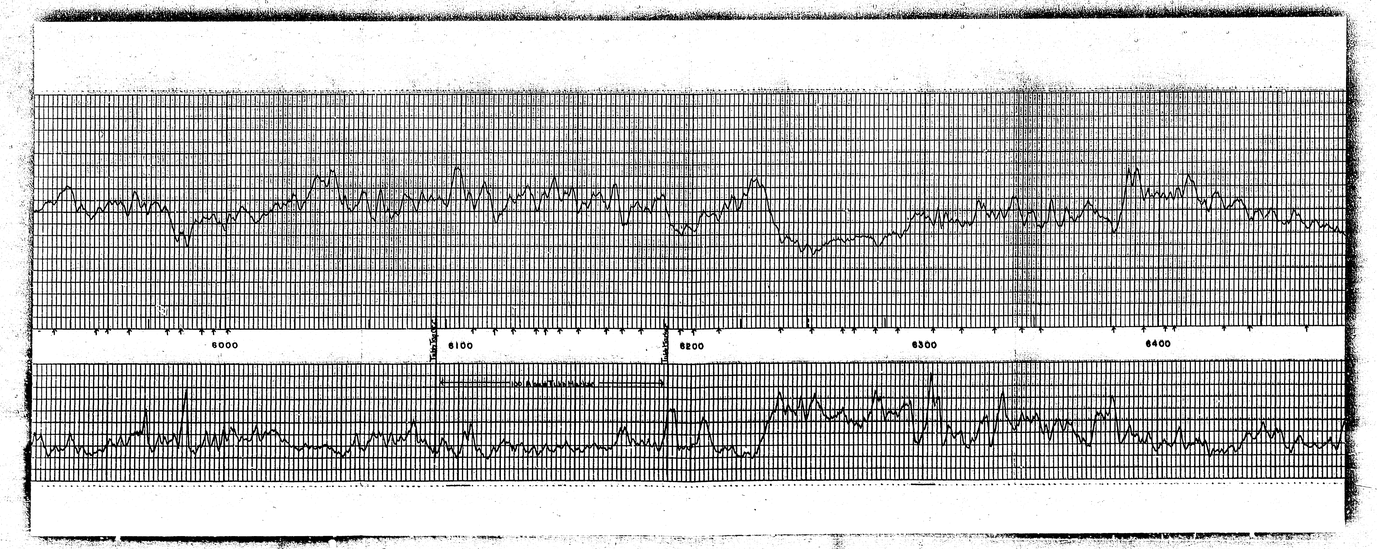

U.S.N.C.F. MICROGRAPHICS
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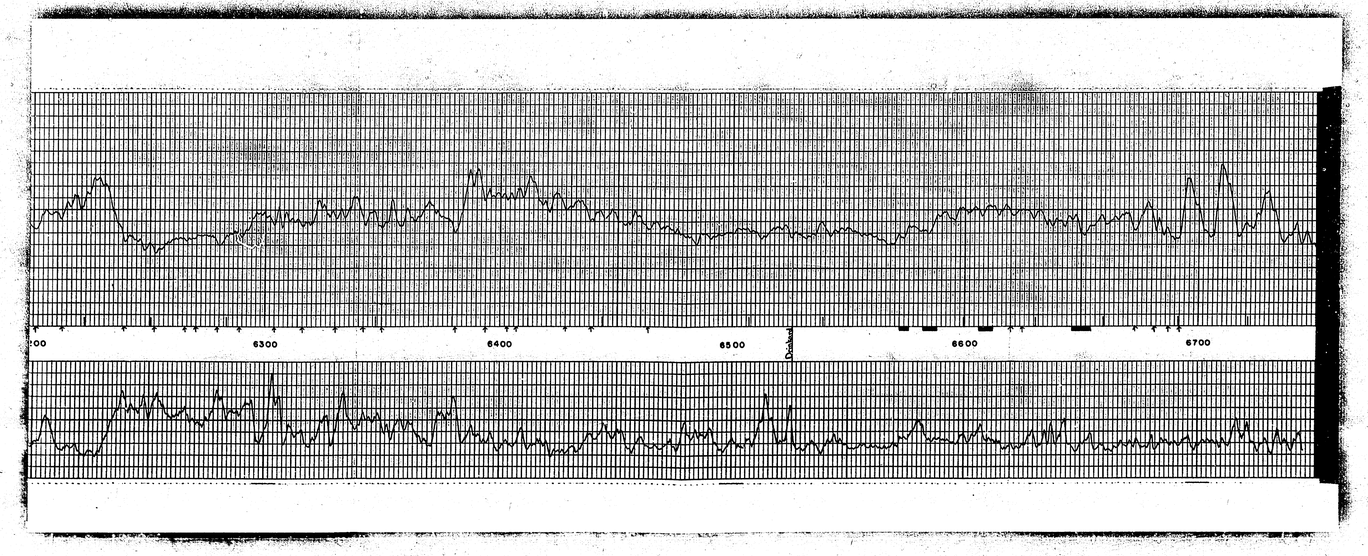

W.R.C.P. MICROGRAPHICS
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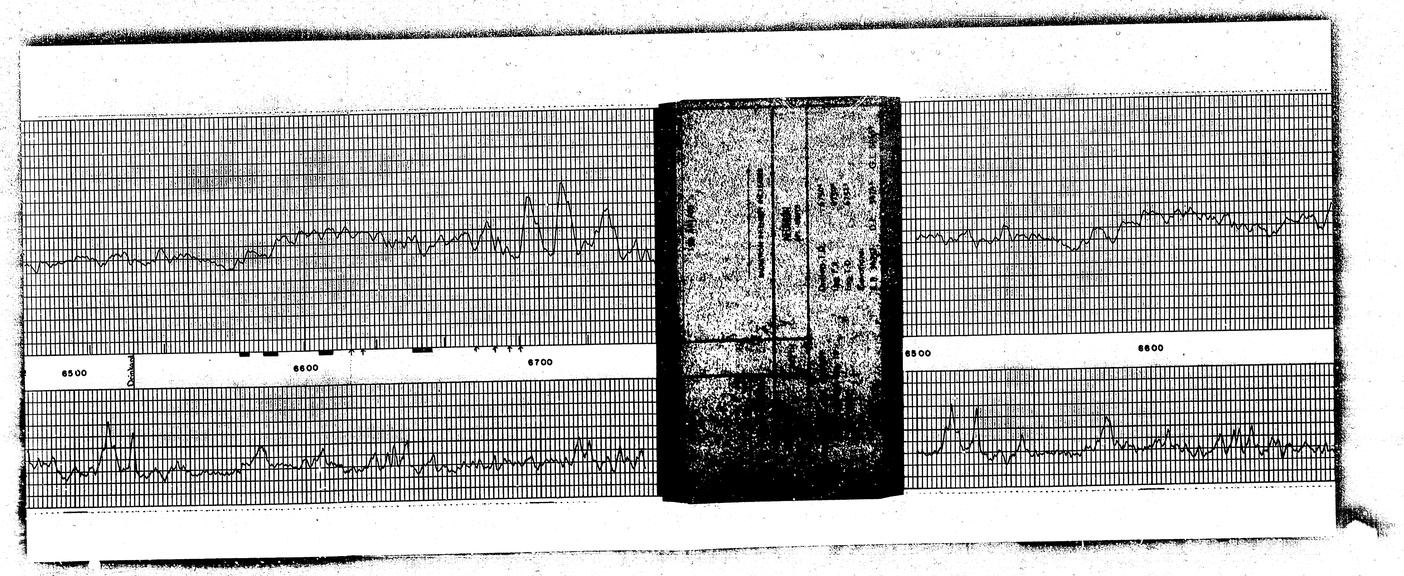

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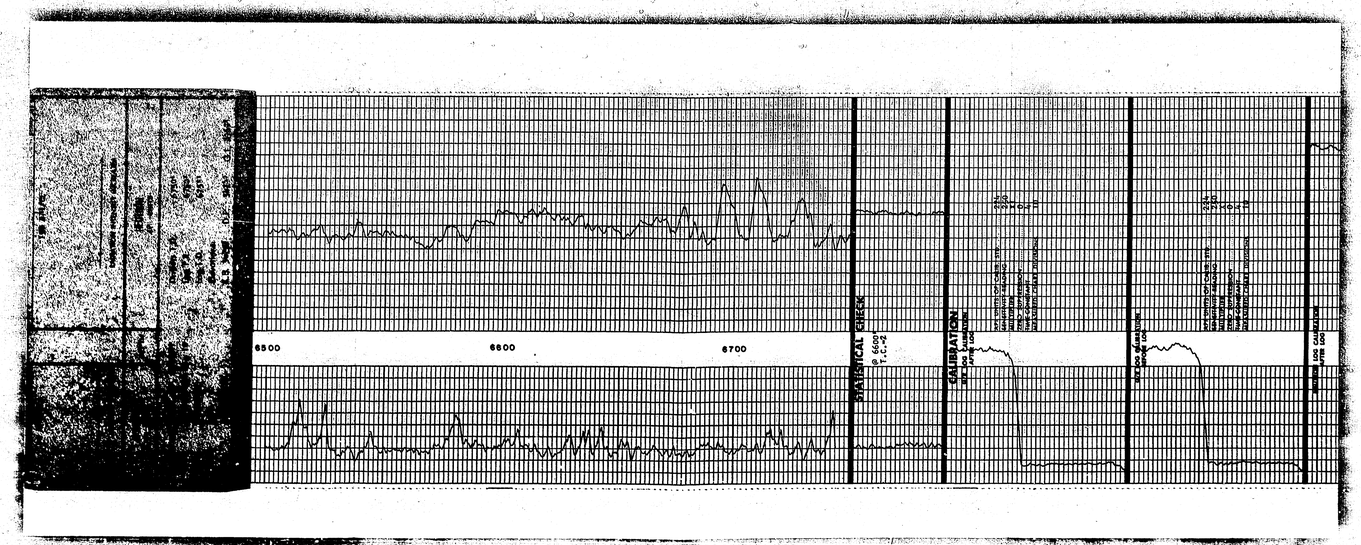

M.N.H.C.F. MICROGRAPHICS
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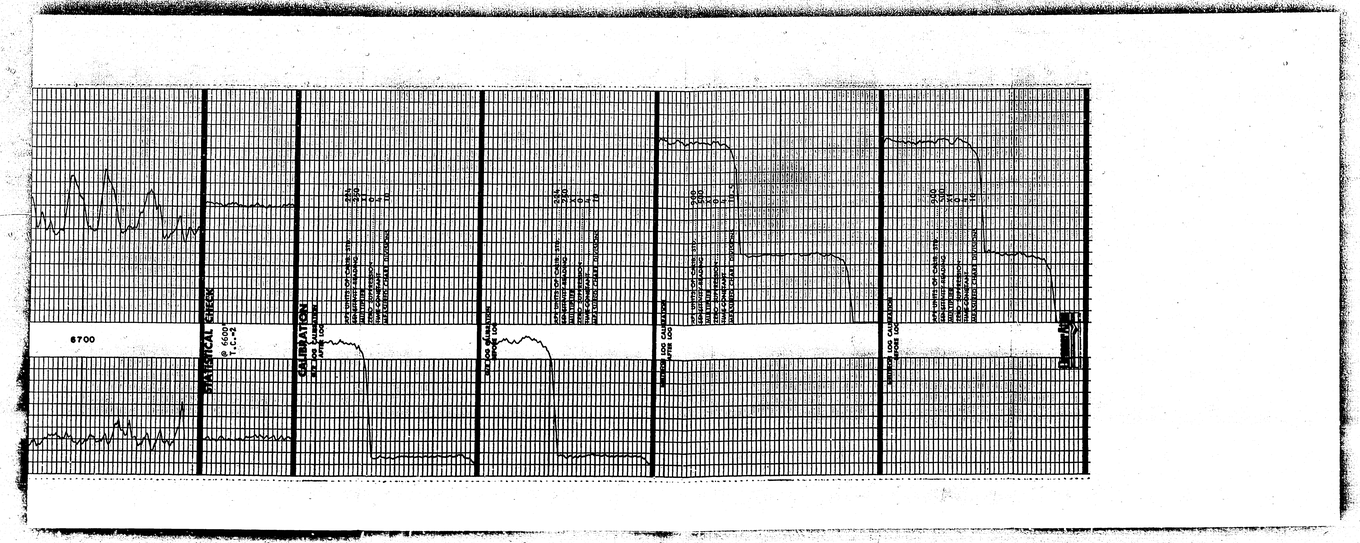

V.R.N.C.F. MICROGRAPHICS
BEST AVAILABLE COPY

OFFSET OPERATORS

Livingston No. 10
Blinebry/Drinkard and Tubb Oil Fields
Lea County, New Mexico

AZTEC OIL AND GAS COMPANY
P. O. Box 337
HOBBS, NM 88240

CONTINENTAL OIL COMPANY
P. O. Box 460
HOBBS, NM 88240

MORRIS R. ANTWEIL
P. O. Box 2010
HOBBS, NM 88240

AMOCO PRODUCTION COMPANY
P. O. Box 3092
HOUSTON, TX 77001

TEXACO, INC.
P. O. Box 3109
MIDLAND, TX 79702

EXXON COMPANY - U.S.A.
P. O. Box 1600
MIDLAND, TX 79702

SUMMIT ENERGY, INC.
112 N. First
ARTESIA, NM 88210

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 9
CASE NO. 6099

V.R.N.C.F. MICROGRAPHICS
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