

APPLICATION FOR DOWNHOLE
COMMINGLING

to

NEW MEXICO OIL CONSERVATION DIVISION

The following information is submitted as required under rule 303-C-2 in application to the New Mexico Oil Conservation Division for approval of downhole commingling:

- (a) Operator's Name and Address:

Lobo Production
PO Box 2364
Farmington, NM 87499

- (b) Lease name, well number, and well location:

Mesa-Twin Mounds #1-30
Section 30, T30N, R14W
790 FNL & 990' FWL
San Juan County, New Mexico

- (c) The pools to be commingled are:

Wildcat Greenhorn (Gallup)
Basin Dakota

- (d) Exhibit "A" represents a plat of the acreage showing the offsetting ownership. The well of reference has 40 acres dedicated to the Gallup Pool, and 320 acres dedicated to the Dakota in the N/2 Section 30, T30N, R14W, San Juan County, New Mexico.

- (e) The well was tested in October 1983, and attached as Exhibit "B" is the packer leakage test indicating the shut in pressure of the Gallup and Dakota zones. Attached as Exhibit "C" is an engineers projection as to the production for the next five years for the Gallup and Dakota zones. Attached as Exhibits "D" and "E" are completion reports for the Gallup and Dakota zones.

Note: The Greenhorn was completed with the Dakota zone and a separate test of the Greenhorn was not made.

- (f) From the packer-leakage test (Exhibit B) the Gallup pressure was 621 psi and the Dakota-Greenhorn pressure was 1148 psi. Bottom hole pressure test were not performed.

- (g) Gallup oil 42.2 gravity
Daktoa Oil 46.6 gravity

Both zones produce a paraffin based oil. The Dakota produced $1\frac{1}{2}$ BO per day during testing. Northwest Pipeline has indicated they expect the Dakota zone to produce 210 MCF of gas per day, and the Gallup to produce 75 MCF of gas per day during the first year of production.

- (h) Northwest Pipeline (first purchaser) has assigned 360,000 MCF of reserves to the #1 Mesa-Twin Mounds-30 and 240,000 MCF of reserves to the #2 Mesa-Twin Mounds-30. The Greenhorn was not completed in the #2 Mesa-Twin Mounds-30 indicating that additional reserves were assigned to the #1 Mesa-Twin Mounds-30 because of the Greenhorn formation.

- (i) Allocation of production will be based on the amount of pay zone and relative porosity of the two zones, as follows:

Greenhorn 7' @ 2% = 1.4 %ft.

Dakota 5' @ 9% = 4.5 %ft.

6' @ 10% = 6.0 %ft.

2' @ 8 % = 1.6 %ft.

Total Dakota 12.1 % ft.

The % Greenhorn $\frac{1.4}{13.5} = 10.4\%$ to the Greenhorn
Ownership of Greenhorn and Dakota rights are the same.

- (j) All offset operators and the Bureau of Land Management (USGS) have been notified. Copies of the letters are attached.

R 15W

R 14W

14

TELMCO
2.1 mi. S-45°
TD. 4550

13

18

17

16

23

24

MTN
FUEL

Drilling well
Dugan
Prod
Kd Test
MTN FUEL
19

MTN
FUEL

SOME
1.20 mi
TD. 5335

21

T
30
N

26

MTN
FUEL

4000 PROD.
Area - Twp. 10 N. R. 15 W.
Kd
TD. 5130

29

320 Acres
Dedicated to Kd

28

CATHERINE KELLY

MESA Petroleum
(MTN Limited Partnership)
Farmed out to
Kd Road

TENNECO

TENNECO

EL PASO

MTS
Limited
Partnership

35
SUNNY
1.3 mi. S-45°
TD. 4625

36

31

32

MESA
1.5 mi. S-45°
TD. 4625

33

PURCO
1.5 mi. S-45°
TD. 4625

MTN. FUEL
0.1 mi. S-45°
TD. 4625

DUGAN
1.5 mi. S-45°
TD. 4625

CRAD
1.5 mi. S-45°
TD. 4625

DUGAN
1.5 mi. S-45°
TD. 4625

SUN. MOUNT
1.5 mi. S-45°
TD. 4625

DUGAN
1.5 mi. S-45°
TD. 4625

PURCO
1.5 mi. S-45°
TD. 4625

DUGAN
1.5 mi. S-45°
TD. 4625

EL PASO
1.5 mi. S-45°
TD. 4625

DUGAN
1.5 mi. S-45°
TD. 4625

DUGAN
1.5 mi. S-45°
TD. 4625

DUGAN
1.5 mi. S-45°
TD. 4625

CANON
1.5 mi. S-45°
TD. 4625

CANON
1.5 mi. S-45°
TD. 4625

SUN. MOUNT
1.5 mi. S-45°
TD. 4625

EL PASO
1.5 mi. S-45°
TD. 4625

SAN JUAN

7b. OFFSet Leases

T30N, R14W, Sec. 19-20
T30N, R15W, Sec. 24 N/2 Sec. 25

Mountain Fuel
PO Box 11368
Salt Lake City, Utah 84139

Above acreage farmed out to

Dugan Productions
Box 208
Farmington, NM 87499

T30N, R14W, Sec. 32

MTS Limited Partnership
Mesa Petroleum
General Partner
1660 Lincoln, Suite 2800
Denver, CO 80264

T30N, R14W, Sec. 29

Tenneco
PO Box 2511
Huston, Texas 77001

T30N, R15W, Sec. 36

El Paso Natural Gas
PO Box 4289
Farmington, NM 87499

T30N, R15W, S/2 Sec. 25

Kelly Family Land Co.
% James J. Kelly
300 S. 4th. St.
Suite 410
Las Vegas, Nevada 89101

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Lobo Production Company Lease Mesa Twin Mound "30" Well No. 1
Location _____
Well: Unit D Sec. 30 Twp. 30N Rge. 14W County San Juan
Name of Reservoir or Pool _____ Type of Prod. _____ Method of Prod. _____ Prod. Medium _____
(Oil or Gas) (Flow or Art. Lift) (Tbg. or Csg.)
Upper Completion Gallup oil pump 2 1/16" tubing
Lower Completion Dakota gas flow 1 1/2" tubing

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Compl	Hour, date 09:00	Length of time shut-in 7 days	SI press. psig 500	Stabilized? (Yes or No) yes
Lower Compl	Hour, date 9/29/83	Length of time shut-in 7 days	SI press. psig 1300	Stabilized? (Yes or No) yes

FLOW TEST NO. 1

Commenced at (hour, date)* 09:35 10/6/83 Zone producing (Upper or Lower): Lower

Time (hour, date)	Lapsed time since*	Pressure		Prod. Zone Temp.	Remarks
		Upper Compl.	Lower Compl.		
09:50	0:15	500	272	60 °F	Flowing at slight
10:05	0:30	500	220	60 °F	Mist throughout
10:20	0:45	501	162	60 °F	Test
10:35	1:00	502	124	60 °F	
11:35	2:00	502	68	60 °F	
12:35	3:00	502	50	60 °F	

Production rate during test

Oil: _____ BOPD based on _____ Bbls. in _____ Hrs. _____ Grav. _____ GOR _____
Gas: _____ MCFPD; Tested thru (Orifice or Meter): _____

MID-TEST SHUT-IN PRESSURE DATA

Upper Compl	Hour, date 09:00	Length of time shut-in 14 days	SI press. psig 621	Stabilized? (Yes or No) Yes
Lower Compl	Hour, date 12:35	Length of time shut-in 7 days	SI press. psig 1148	Stabilized? (Yes or No) Yes

FLOW TEST NO. 2

Commenced at (hour, date)** 09:00; 10-13-83 Zone producing (Upper or Lower): Upper

Time (hour, date)	Lapsed time since **	Pressure		Prod. Zone Temp.	Remarks
		Upper Compl.	Lower Compl.		
10/13 09:00	Shut-in	621	1148		
10/13 09:15	15 min.	30	1148		
10/14 09:00	24	30	1167		

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DIST. 3

Production rate during test

Oil: 90 BOPD based on _____ Bbls. in _____ Hrs. _____ Grav. _____ GOR _____
Gas: _____ MCFPD; Tested thru (Orifice or Meter): _____

REMARKS:

83 TEST

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

Approved:

Oil Conservation Division

Charles Gholson

Original Signed by CHARLES GHOLSON

Title

Operator

By

Title

Date

[Signature]

Operator

2-1-84

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DIST. 3

1. In packer leakage test shall be commenced immediately after completion of well within seven days after actual completion of well, and annually thereafter as prescribed by the order authorizing multiple completion. Such tests shall also be commenced on all multiple completions within seven days following recompletion and/or chemical or fracture treatment, and whenever remedial work has been done on a well during which the packer or the tubing have been disturbed. Tests shall also be taken at any time that communication is suspected or when requested by the Commission.

2. At least 72 hours prior to the commencement of any packer leakage test, the operator shall notify the Commission in writing of the exact time the test is to be commenced. Offset operators shall also be so notified.

3. The packer leakage test shall commence when both zones of the dual completion are shut-in for pressure stabilization. Both zones shall remain shut-in until the well-head pressure in each has stabilized, provided however, that they need not remain shut-in more than seven days.

4. For flow test No. 1, one zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. Such test shall be continued for seven days in the case of a gas well and for 24 hours in the case of an oil well. Note: If, on an initial packer leakage test, a gas well is being flowed to the atmosphere due to the lack of a pipeline connection the flow period shall be three hours.

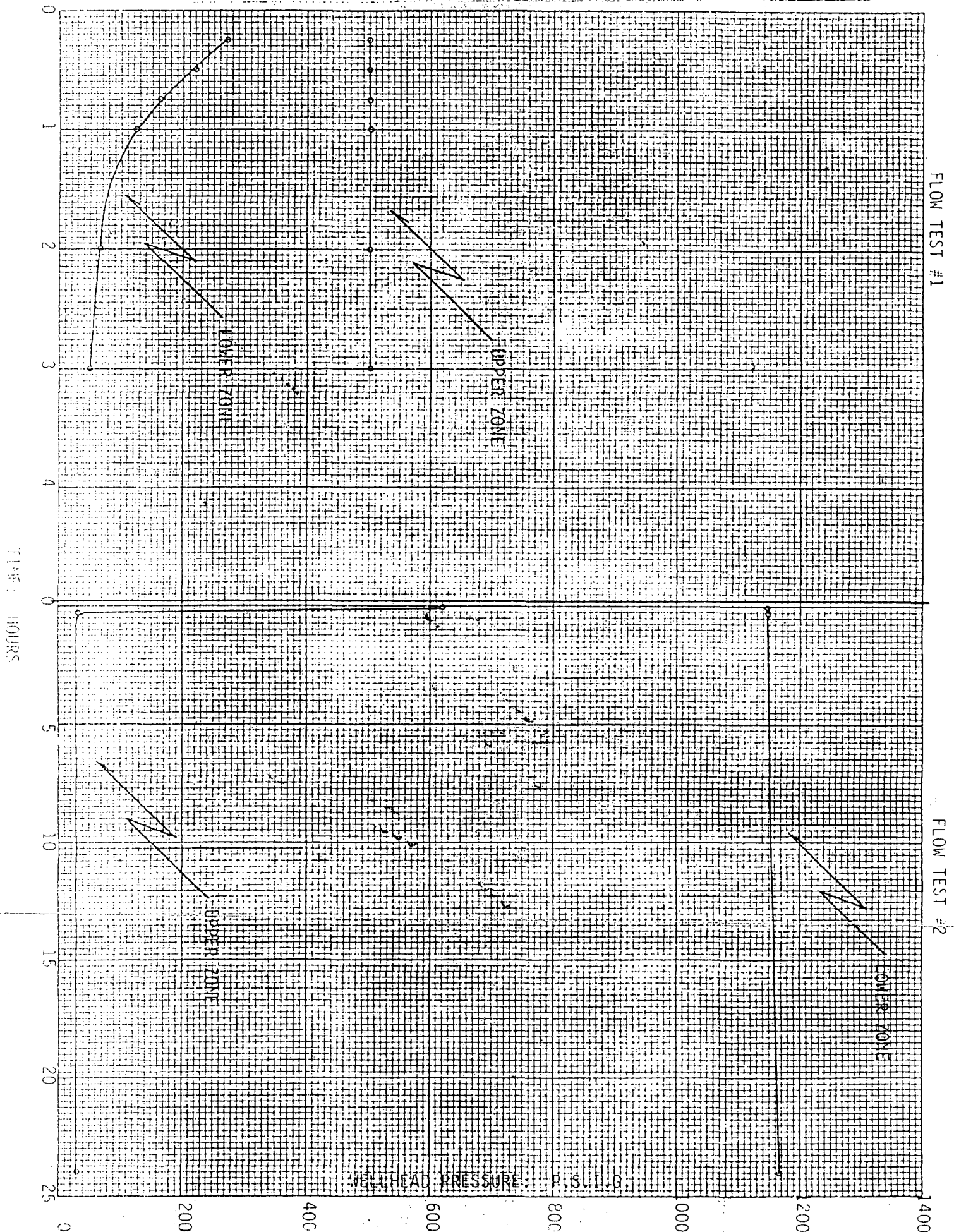
5. Following completion of flow test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.

6. Flow test No. 2 shall be conducted even though no leak was indicated during flow test No. 1. Procedure for flow test No. 2 is to be the same as for flow test No. 1 except that the previously produced zone shall remain shut-in while the zone which was previously shut-in is produced.

7. Pressures for gas zone tests must be measured on each zone with a deadweight pressure gauge at intervals as follows: 3 hours tests: immediately prior to the beginning of each flow-period, at fifteen-minute intervals during the first hour thereof, and at hourly intervals thereafter, including one pressure measurement immediately prior to the conclusion of each flow period. 7-day tests: immediately prior to the beginning of each flow period, at least one time during each flow period (at approximately the midway point) and immediately prior to the conclusion of each flow period. Other pressures may be taken as desired, or may be requested on wells which have previously shown questionable test data.

8. 24-hour oil zone tests: all pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges the accuracy of which must be checked at least twice, once at the beginning and once at the end of each test, with a deadweight pressure gauge. If a well is a gas-oil or an oil-gas dual completion, the recording gauge shall be required on the oil zone only, with deadweight pressures as required above being taken on the gas zone.

9. The results of the above-described tests shall be filed in triplicate within 15 days after completion of the test. Tests shall be filed with the Aztec District Office of the New Mexico Oil Conservation Commission on Northwest New Mexico Packer Leakage Test Form Revised 11-1-58, with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only). A pressure versus time curve for each zone of each test shall be constructed on the reverse side of the Packer Leakage Test form with all deadweight pressure points taken indicated thereon. For oil zones, the pressure curve should also indicate all key pressure changes which may be reflected by the recording gauge charts. These key pressure changes should also be tabulated on the front of the Packer Leakage Test form.





WALSH

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

3001 Northridge Drive
P.O. Drawer 419
Farmington, New Mexico 87401
(505) 327-4892

EVALUATION REPORT FOR
LOBO PRODUCTION
CONCERNING WORKING INTEREST
IN DAKOTA AND GALLUP WELL
SAN JUAN COUNTY, NEW MEXICO
NM83-115
5 YEAR CASH FLOW ANALYSIS

October 28, 1983

Ewell N. Walsh, P.E.
State of New Mexico
Registration No. 4324

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DIST. 3

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RUN DATE OCT 28, 1983
LEASE NAME: MESA TWIN MOUNDS
FIELD NAME: CHA CHA GALLUP
FORMATION : GALLUP

EVALUATION: SEC. 1 1 IN DE: LOBO, DE
OPERATOR : LOBO PRODUCTION
CNTY. STATE: SAN JUAN COUNTY, NEW MEXICO

INTERESTS AND DATE FIRST EFFECTIVE
IDENTITY: 027-26-01-01-110-06-23-02-02-01
COST LIQUID GAS DATE
.4000000 .3200000 .3200000 11/1/83

WALSH ENGINEERING AND PRODUCTION CORP.
EVALUATION FOR: LOBO PRODUCTION
ESCALATED
NM83-115

FRESEED MONTH M
10.00 130.562
15.00 118.445
20.00 108.238
25.00 99.624
30.00 92.283

WELL COUNT	API	BASE	TRANS.	PROD.	ADVAL	REGIN	ENDING	LIFE	WT	BL/MMCF	CUMULATIVE	REMAINING	ULTIMATE	% GROSS
GROSS	NET OR RTU	PRICE	CHARGE	TAXES	TAXES	29.60	37.23	32.17			1.800	18.488	20.288	41.13%
OIL	1.	0.40	0.02	8.02	0.42									

Y E A R	GROSS	WELL COUNT	WELLS/MO	PRODUCTION	NET GAS	EFFECTIVE	GAS	GROSS OIL	COND PROD	NET OIL	EFF OIL	OIL + COND	TOTAL
				MMCF	MMCF	\$/MMCF	MMCF	MMBLS	MMBLS	MMBLS	\$/BBL	MMBLS	MMBLS
1983 (2MO)	1.000			0.000	0.000	0.000	0.000	0.863	0.276	0.276	29.600	8.172	8.172
1984	1.000			0.000	0.000	0.000	0.000	4.445	1.422	1.422	29.600	42.102	42.102
1985	1.000			0.000	0.000	0.000	0.000	3.766	1.205	1.205	30.564	36.829	36.829
1986	1.000			0.000	0.000	0.000	0.000	3.481	1.114	1.114	32.458	36.152	36.152
1987	1.000			0.000	0.000	0.000	0.000	3.307	1.058	1.058	34.460	36.462	36.462
1988 (10MO)	1.000			0.000	0.000	0.000	0.000	2.629	0.841	0.841	36.404	30.625	30.625

Y E A R	GROSS	WELL COUNT	WELLS/MO	PRODUCTION	NET GAS	EFFECTIVE	GAS	GROSS OIL	COND PROD	NET OIL	EFF OIL	OIL + COND	TOTAL
				MMCF	MMCF	\$/MMCF	MMCF	MMBLS	MMBLS	MMBLS	\$/BBL	MMBLS	MMBLS
1989	1.000			0.000	0.000	0.000	0.000	0.000	0.000	0.000	29.600	8.172	8.172
1990	1.000			0.000	0.000	0.000	0.000	4.445	1.422	1.422	29.600	42.102	42.102
1991	1.000			0.000	0.000	0.000	0.000	3.766	1.205	1.205	30.564	36.829	36.829
1992	1.000			0.000	0.000	0.000	0.000	3.481	1.114	1.114	32.458	36.152	36.152
1993	1.000			0.000	0.000	0.000	0.000	3.307	1.058	1.058	34.460	36.462	36.462
1994	1.000			0.000	0.000	0.000	0.000	2.629	0.841	0.841	36.404	30.625	30.625
1995	1.000			0.000	0.000	0.000	0.000	0.000	0.000	0.000	29.600	8.172	8.172
1996	1.000			0.000	0.000	0.000	0.000	4.445	1.422	1.422	29.600	42.102	42.102
1997	1.000			0.000	0.000	0.000	0.000	3.766	1.205	1.205	30.564	36.829	36.829
SUR TOTAL	1.000			0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342	190.342
REMAINDER	1.000			0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342	190.342
TOT 5.0 YR	1.000			0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342	190.342

Y E A R	PROD & WPT	DIR OPR	EXP	TOT OPR	EXP	OPERATING	TANGIBLE	INTANGIBLE	BEFIT	CUM BEFIT	EFFIT C.F.	CUM C.F.
	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF
1983 (2MO)	0.943		0.271	1.214	6.958	0.000	0.000	0.000	6.958	6.958	6.849	6.849
1984	4.381		1.672	6.053	36.049	0.000	0.000	0.000	43.007	43.007	33.055	37.904
1985	3.501		1.773	5.280	31.549	0.000	0.000	0.000	74.556	74.556	25.442	65.346
1986	3.017		1.913	4.930	31.221	0.000	0.000	0.000	105.777	105.777	22.162	87.513
1987	2.917		2.063	4.980	31.483	0.000	0.000	0.000	137.260	137.260	19.697	107.210
1988 (10MO)	2.450		1.842	4.292	26.333	0.000	0.000	0.000	163.592	163.592	14.557	121.767
1989												
1990												
1991												
1992												
1993												
1994												
1995												
1996												
1997												
SUR TOTAL	1.000		0.000	0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342
REMAINDER	1.000		0.000	0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342
TOT 5.0 YR	1.000		0.000	0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342

Y E A R	PROD & WPT	DIR OPR	EXP	TOT OPR	EXP	OPERATING	TANGIBLE	INTANGIBLE	BEFIT	CUM BEFIT	EFFIT C.F.	CUM C.F.
	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF	MMCF
1983 (2MO)	0.943		0.271	1.214	6.958	0.000	0.000	0.000	6.958	6.958	6.849	6.849
1984	4.381		1.672	6.053	36.049	0.000	0.000	0.000	43.007	43.007	33.055	37.904
1985	3.501		1.773	5.280	31.549	0.000	0.000	0.000	74.556	74.556	25.442	65.346
1986	3.017		1.913	4.930	31.221	0.000	0.000	0.000	105.777	105.777	22.162	87.513
1987	2.917		2.063	4.980	31.483	0.000	0.000	0.000	137.260	137.260	19.697	107.210
1988 (10MO)	2.450		1.842	4.292	26.333	0.000	0.000	0.000	163.592	163.592	14.557	121.767
1989												
1990												
1991												
1992												
1993												
1994												
1995												
1996												
1997												
SUR TOTAL	1.000		0.000	0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342
REMAINDER	1.000		0.000	0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342
TOT 5.0 YR	1.000		0.000	0.000	0.000	0.000	0.000	18.489	5.917	5.917	32.171	190.342

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DIST. 3

WELL NAME: MESA TWIN HOUNDS
FIELD NAME: BASIN DAKOTA
FORMATION: DAKOTA

INTERESTS AND DATE FIRST EFFECTIVE
COST LIQUID GAS DATE
.4000000 .3200000 .3200000 11/1/83

WALSH ENGINEERING AND PRODUCTION CORPORATION
EVALUATION FOR: LOBO PRODUCTION
ESCALATED
NM83-115

EVALUATION: SEQ. # 2 IN DR: LOBO, DR
OPERATOR: LOBO PRODUCTION
CITY: STATE: SAN JUAN COUNTY, NEW MEXICO

WELL COUNT	API	BASE	TRANS.	PROD.	ADVAL	REGIN	ENDING	LIFE	WT	CF/REL	G R O S S	R E S E R V E S	% GROSS
GROSS	NET OR RTU	PRICE	CHANGE	TAXES	TAXES	END	LIFE	WT	REL/MCF	CUMULATIVE	REMAINING	ULTIMATE	REMAINING
1.	0.40		0.02	8.02	0.42	3.08	4.51	3.70	0.000	153.545	153.545	100.00%	GAS

Y E A R	GROSS	GROSS	NET	GAS	EFFECTIVE	GAS	GROSS	COND	PROD	NET	EFF	OIL &	OIL &	TOTAL
(2MO)	WELLS/MO	PRODUCTION	PRODUCTION	PRICE	\$/MCF	SALES	HBRLS	PROD	HBRLS	PROD	\$/BBL	SALES	SALES	SALES
1983	1.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1984	1.000	38.719 ¹⁰	12.390		3.191	39.542	0.426	0.136	0.136	0.136	29.600	4.034	4.034	43.576
1985	1.000	32.802 ⁴⁰	10.497		3.460	36.321	0.361	0.115	0.115	0.115	30.564	3.529	3.529	39.850
1986	1.000	30.320 ⁴²	9.702		3.750	36.387	0.374	0.107	0.107	0.107	32.458	3.464	3.464	39.851
1987	1.000	28.804 ⁴⁴	9.217		4.063	37.452	0.317	0.101	0.101	0.101	34.460	3.494	3.494	40.945
1988 (10MO)	1.000	22.900 ⁴³	7.328		4.373	32.045	0.252	0.081	0.081	0.081	36.404	2.934	2.934	34.980

Y E A R	GROSS	GROSS	NET	GAS	EFFECTIVE	GAS	GROSS	COND	PROD	NET	EFF	OIL &	OIL &	TOTAL
(2MO)	WELLS/MO	PRODUCTION	PRODUCTION	PRICE	\$/MCF	SALES	HBRLS	PROD	HBRLS	PROD	\$/BBL	SALES	SALES	SALES
1983	1.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1984	1.000	38.719 ¹⁰	12.390		3.191	39.542	0.426	0.136	0.136	0.136	29.600	4.034	4.034	43.576
1985	1.000	32.802 ⁴⁰	10.497		3.460	36.321	0.361	0.115	0.115	0.115	30.564	3.529	3.529	39.850
1986	1.000	30.320 ⁴²	9.702		3.750	36.387	0.374	0.107	0.107	0.107	32.458	3.464	3.464	39.851
1987	1.000	28.804 ⁴⁴	9.217		4.063	37.452	0.317	0.101	0.101	0.101	34.460	3.494	3.494	40.945
1988 (10MO)	1.000	22.900 ⁴³	7.328		4.373	32.045	0.252	0.081	0.081	0.081	36.404	2.934	2.934	34.980

Y E A R	PROD & WPT	DIR	OPR	EXP	TOT	OPR	TANGIBLE	INTANGIBLE	BEFIT	CUM	BEFIT	DISC	CUM
(2MO)	TAXES + TTC	DIR	OPR	EXP	TAXES	REVENUE	INVESTMENT	INVESTMENT	CASHFLOW	CASHFLOW	CASHFLOW	13.50%	13.50%
1983	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1984	3.572	1.658	5.229	38.347	0.000	38.347	0.000	0.000	38.347	38.347	38.347	35.137	35.137
1985	3.188	1.768	4.956	34.894	0.000	34.894	0.000	0.000	34.894	73.240	73.240	28.154	63.271
1986	3.188	1.903	5.092	34.760	0.000	34.760	0.000	0.000	34.760	108.000	108.000	24.678	87.949
1987	3.276	2.054	5.330	35.616	0.000	35.616	0.000	0.000	35.616	143.616	143.616	22.278	110.227
1988 (10MO)	2.798	1.835	4.634	30.346	0.000	30.346	0.000	0.000	30.346	173.962	173.962	18.899	127.127

Y E A R	PROD & WPT	DIR	OPR	EXP	TOT	OPR	TANGIBLE	INTANGIBLE	BEFIT	CUM	BEFIT	DISC	CUM
(2MO)	TAXES + TTC	DIR	OPR	EXP	TAXES	REVENUE	INVESTMENT	INVESTMENT	CASHFLOW	CASHFLOW	CASHFLOW	13.50%	13.50%
1983	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1984	3.572	1.658	5.229	38.347	0.000	38.347	0.000	0.000	38.347	38.347	38.347	35.137	35.137
1985	3.188	1.768	4.956	34.894	0.000	34.894	0.000	0.000	34.894	73.240	73.240	28.154	63.271
1986	3.188	1.903	5.092	34.760	0.000	34.760	0.000	0.000	34.760	108.000	108.000	24.678	87.949
1987	3.276	2.054	5.330	35.616	0.000	35.616	0.000	0.000	35.616	143.616	143.616	22.278	110.227
1988 (10MO)	2.798	1.835	4.634	30.346	0.000	30.346	0.000	0.000	30.346	173.962	173.962	18.899	127.127

SUB TOTAL	16.022	9.219	25.240	173.962	0.000	0.000	0.000	0.000	173.962	173.962	173.962	127.127	127.127
REMAINDER	16.022	9.219	25.240	173.962	0.000	0.000	0.000	0.000	173.962	173.962	173.962	127.127	127.127
TOT 5.0 YR	16.022	9.219	25.240	173.962	0.000	0.000	0.000	0.000	173.962	173.962	173.962	127.127	127.127

RECEIVED
FEB 15 1984
OIL CON. DIV.
DIST. 3

RUN DATE OCT 28, 1983

INTERESTS AND DATE FIRST EFFECTIVE
COST LIQUID GAS DATE

SUMMARY PROJECTION
NM83-115
LOBO PRODUCTION INTEREST
LOBO PRODUCTION OPERATOR
MESA TWIN HOUNDS LEASE

PRESENT MONTH \$
10.00 267.636
15.00 241.728
20.00 220.103
25.00 201.855
30.00 186.339

WELL COUNT	API	BASE PRICE	TRANS. CHARGE	PROD. TAXES	ADVAL TAXES	BEGIN	ENDING	LIFE W/	CF/RBL	G R O S S	R E S E R V E S	% GROSS
GROSS	NET OR RTU	PRICE	0.02	8.02	0.42	29.60	37.23	32.18	7609.	1.800	20.178	21.978
OIL	2.	0.80	0.02	8.02	0.42	3.08	4.51	3.70		0.000	153.545	153.545
GAS												100.00%

Y E A R	GROSS WELLS/MD	GROSS PRODUCTION	NET GAS PRODUCTION	EFFECTIVE GAS PRICE	GAS SALES	GROSS OIL + COND	NET OIL + COND	EFF OIL & COND	OIL + COND	TOTAL
1983 (2MD)	2.000	0.000	0.000	0.000	0.000	0.863	0.276	29.600	8.172	8.172
1984	2.000	38.719	12.390	3.191	37.542	4.871	1.359	29.600	46.137	85.578
1985	2.000	32.802	10.497	3.460	36.321	4.126	1.320	30.564	40.358	76.679
1986	2.000	30.320	9.702	3.750	36.387	3.814	1.221	32.458	39.616	76.003
1987	2.000	28.804	9.217	4.063	37.452	3.623	1.160	34.460	37.936	77.408
1988 (10MD)	2.000	22.900	7.328	4.373	32.045	2.881	0.922	36.404	33.559	65.604
1989										
1990										
1991										
1992										
1993										
1994										
1995										
1996										
1997										

SUB TOTAL	REMAINDER	TOT 5.0 YR
2.000	153.545	49.134
		3.699
		181.747
		20.178
		6.457
		32.181
		207.798
		389.544

Y E A R	PROD & WPT DIR OPR EXP	TOT OPR EXP	OPERATING REVENUE	TANGIBLE INVESTMENT	INTANGIBLE INVESTMENT	BIT CASHFLOW	CUM BIT CASHFLOW	BIT C.F.	CUM C.F.
1983 (2MD)	0.943	0.271	1.214	0.000	0.000	6.958	6.958	6.849	6.849
1984	7.953	3.330	11.282	0.000	0.000	74.396	81.353	68.192	75.042
1985	6.689	3.547	10.236	0.000	0.000	66.443	147.796	53.576	128.618
1986	6.205	3.817	10.022	0.000	0.000	65.981	213.777	46.844	175.462
1987	6.193	4.117	10.309	0.000	0.000	67.099	280.876	41.975	217.437
1988 (10MD)	5.248	3.677	8.926	0.000	0.000	56.679	337.554	31.566	249.003
1989									
1990									
1991									
1992									
1993									
1994									
1995									
1996									
1997									

SUB TOTAL	REMAINDER	TOT 5.0 YR
33.231	18.759	51.990
		337.554
		0.000
		0.000
		337.554
		249.003
		249.003

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on reverse side)

Form approved
Budget Bureau No. 42-10345-1

6. LEASE DESIGNATION AND SERIAL NO.

NM-27024

7. IF INDIAN, ALLOTTEE OR TRIBE NAME

NA

7. UNIT AGREEMENT NAME

NA

8. FARM OR LEASE NAME

Mesa Twin Mounds

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Wc Gallup-Basin Dakota

11. SEC. T. R. N., OR BLOCK AND SURVEY OR AREA

Sec. 30, T 30N, R 14W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mex.

14. ELEV. CASINGHEAD

5492'

15. ELEVATIONS (DP, RKB, RT, OR, ETC.)*

5505 KB

16. DATE SPUNDED

6-28-83

17. DATE T.D. REACHED

7-5-83

18. DATE COMPL. (Ready to prod.)

7-18-83

19. TOTAL DEPTH, MD & TVD

5830'

20. PLUG, BACK T.D., MD & TVD

5782'

21. IF MULTIPLE COMPL., HOW MANY*

2

22. INTERVALS DRILLED BY

ROTARY TOOLS

0-5830

23. CABLE TOOLS

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

4729-5161' Gallup

5545-5710' Graneros Dakota

25. WAS DIRECTIONAL SURVEY MADE

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Induction, Spontaneous Potential

27. WAS WELL CAGED

No

28. COMPENSATED DENSITY, DUAL SPACED NEUTRON, GAMMA RAY, GAS SPECTRUM

29. CASINO RECORD (Report all strings set in well)

30. CEMENTING RECORD

31. AMOUNT PULLED

32. LINER RECORD

33. TUBING RECORD

34. PACKER SET (MD)

35. RBP

36. PERFORATION RECORD (Interval, size and number)

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

38. DEPTH INTERVAL (MD)

39. AMOUNT AND KIND OF MATERIAL USED

40. 5617-5710

41. 500 gals 15% HCl, 110,000#

42. 20/40 in 85,5000 gls gel H2O

43. 4724-5160

44. 500 gals 10% Acetic, 230,000

45. 20/40 in 700 Foam, 45,000 gal

46. Water, 2.510 Mil SQF Nirtoger

47. PRODUCTION

48. FIRST PRODUCTION

49. PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

50. WELL STATUS (Producing or shut-in)

51. Producing Gallup

52. Shut in Dakota

53. DATE OF TEST

54. HOURS TESTED

55. CHOKER SIZE

56. PROD'N. FOR TEST PERIOD

57. OIL—BBL.

58. GAS—MCF.

59. WATER—BBL.

60. OIL GRAVITY-API (CORR.)

61. 7-18-83

62. 24

63. 1 1/2"

64. 45

65. 150

66. 0

67. 3.333

68. 50#

69. 375

70. 45B0

71. 150

72. 0

73. 49

74. TEST WITNESSED BY

75. Gary Roberts

76. LIST OF ATTACHMENTS

77. Logs mailed direct by Logging Company

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

79. SIGNED

80. TITLE

81. Operator

82. DATE

83. 8-3-83

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

INSTRUCTIONS

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

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

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

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

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

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

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

37. SUMMARY OF POROSITY AND CONTENTS THEREOF: CORREL INTERVALS, AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING, AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAN DEPTH TRUE VERT. DEPTH
Picture Cliff	948	1131	Sandstone-H2O-trace of gas		
Chacra	1632	1875	Sandstone & Shale-H2O		
Cliff House	1930	1983	Sandstone-H2)-Trace of Oil		
Point Lookout	3423	3734	Sandstone-H2O-Trace of Gas		
Mancos	3734	4720	Shale		
Gallup	4720	4990	Sandstone, Shale, Oil & Gas		
Lower Gallup	4990	5272	Sandstone, Shale Oil & Gas		
Greenhorn	5499	5562	Limestone & SS Gas		
Graneros Dakota	5608	TD	Sandstone Gas		
TD	5830				

Perforations Gallup:

4729, 4735, 4752, 4758, 4764, 4767, 4775, 4777, 4779, 4785, 4811, 4814,
4818, 4840, 4879, 4966, 4981, 4988, 4998, 5023, 5037, 5049, 5078,
5080, 5123, 5161,

Perforations Dakota:

5545, 5549, 5550, 5552, 5618, 5619, 5620, 5621, 5622, 5623, 5634,
5635, 5636, 5637, 5638, 5639, 5640, 5708, 5710.

Cement Record and Additives:

Cemented in 2 stages, 1st stage 400 sks (544 cuft) Class B with 6 1/4# /sk gil-
sonite, 1/4# /sk Floseal, 8# /sk salt,

2nd Stage: 200 sks (320 cuft) Class B, 65/35 poz, with 12% gel, 10# /sk
gilsonite followed by 400 sks (848 cuft) 65/35 poz with 6% gel, 10# sk gilsonite,
followed by 50 sks. (59 cuft.) Class B neat

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R855.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐

2. NAME OF OPERATOR

LOBO PRODUCTION

3. ADDRESS OF OPERATOR

P.O. Box 2364, Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with State instructions)

At surface 790' FNL 990' FWL

At top prod. interval reported below Same

At total depth Same

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

6-28-83

16. DATE T.D. REACHED

7-5-83

17. DATE COMPL. (Ready to prod.)

7-18-83

18. ELEVATIONS (DF, RES, RT, OF ETC.)

5505 KB

20. TOTAL DEPTH, MD & TVD

5830'

21. PLUG BACK T.D., MD & TVD

5782'

22. IF MULTIPLE COMPL. HOW MANY?

2

23. INTERVALS DRILLED BY

ROTARY TOOLS

0-5830'

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

5545'-5710' Graneros Dakota

26. TYPE ELECTRIC AND OTHER LOGS RUN

Duel Induction, Spontaneous Potential
Compensated Density, Dual Spaced Neutron, Gamma Ray, Gas Spectrum

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

CASINO SIZE	WEIGHT, LB./FT.	DEPTH-SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24# K55	212.90 KB	12 1/4"	150 sks cls. B (127.5 cu ft)	
5 1/2"	17.0# J55	5830'	7 7/8"	400 sks cls. B (344 cu ft)	
				200 sks cls. B (320 cu ft)	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH-SET (MD)	PACKER-SET (MD)
					2 3/8	4730'	5400' RBP

31. PERFORATION RECORD (Interval, size and number)

See Attachment

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5617-5710	500 gals 15% HCL, 110,000# 20/40 in 85,500 gls gel H2O

33.*

PRODUCTION

DATE FIRST PRODUCTION

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

WELL STATUS (Producing or shut-in)

Temp. Bridge Plug

Flowing

Shut In

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7-13	24	1/2"	→	0	572 MCF Est.	0	N/A
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL-GRAVITY-API (CORR.)	
80 lbs.	660 lbs.	→	0	572 MCF est.	0	N/A	

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

Vented and set temporary bridge plug

TEST WITNESSED BY

GARY ROBERTS

35. LIST OF ATTACHMENTS

Perforation and Cement Record

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

SIGNED

R. E. Johnston

TITLE

Partner - Operator

DATE

8-10-83

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

[illegible]

CS-2

Perforations Dakota:

5545, 5549, 5550, 5552, 5618, 5619, 5620, 5621, 5622, 5623, 5634,
5635, 5636, 5637, 5638, 5639, 5640, 5708, 5710.

Cement Record and Additives:

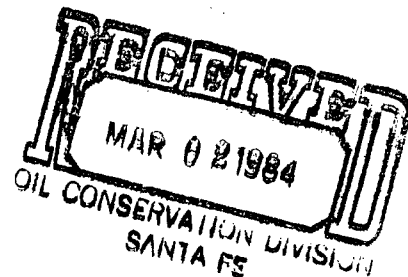
Cemented in 2 stages, 1st stage 400 sks (544 cuft) Class B with 6 1/4# /sk gil-
sonite, 1/4#/sk Floseal, 8#/sk salt,

2nd Stage: 200 sks (320 cuft) Class B, 65/35 poz, with 12% gel, 10#/sk
gilsonite followed by 400 sks (848 cuft) 65/35 poz with 6% gel, 10# sk gilsonite,
followed by 50 sks. (59 cuft.) Class B neat

LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87401
TELEPHONE: (505) 327-0331

February 13, 1984

Bureau of Land Management
Caller Service 4104
Farmington, NM 87499



RE: #1 Mesa-Twin Mounds-30
Section 30, T30N, R14W
San Juan County, New Mexico
790' FNL & 990' FWL

Dear Sirs:

This is to notify you that Lobo Production is making application for permission to commingle production from the Wildcat Greenhorn and the Basin Dakota in the #1 Mesa-Twin Mounds-30 well, San Juan County New Mexico.

If you have any objections or comments regarding the commingling please contact the New-Mexico Oil Conservation Division as follows:

Mr. Joe Ramy, Director
PO Box 2088
Santa Fe, New Mexico 87501

Thank you for your cooperation.

Sincerely,

R.E. Lauritsen

LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87401
TELEPHONE: (505) 327-0331

February 13, 1984

El Paso Natural Gas
PO Box 4289
Farmington, NM 87499



RE: #1 Mesa-Twin Mounds-30
Section 30, T30N, R14W
San Juan County, New Mexico
790' FNL & 990' FWL

Dear Sirs:

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Mr. Joe Ramy, Director
PO Box 2088
Santa Fe, New Mexico 87501

Thank you for your cooperation.

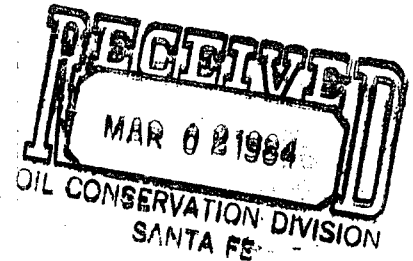
Sincerely,


R.E. Lauritsen

LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87401
TELEPHONE: (505) 327-0331

February 13, 1984

Tenneco
PO Box 2511
Houston, Texas 77001



RE: #1 Mesa-Twin Mounds-30
Section 30, T30N, R14W
San Juan County, New Mexico
790' FNL & 990' FWL

Dear Sirs:

This is to notify you that Lobo Production is making application for permission to commingle production from the Wildcat Greenhorn and the Basin Dakota in the #1 Mesa-Twin Mounds-30 well, San Juan County New Mexico.

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Mr. Joe Ramy, Director
PO Box 2088
Santa Fe, New Mexico 87501

Thank you for your cooperation.

Sincerely,

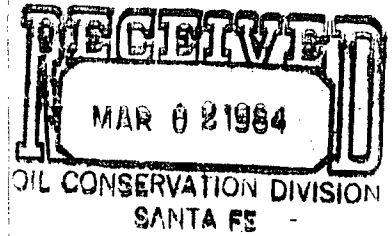
A handwritten signature in cursive script, appearing to read "R.E. Lauritsen".

R.E. Lauritsen

LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87401
TELEPHONE: (505) 327-0331

February 13, 1984

MTS Limited Partnership
Mesa Petroleum
1660 Lincoln Suite 2800
Denver, Co. 80264



RE: #1 Mesa-Twin Mounds-30
Section 30, T30N, R14W
San Juan County, New Mexico
790' FNL & 990' FWL

Dear Sirs:

This is to notify you that Lobo Production is making application for permission to commingle production from the Wildcat Greenhorn and the Basin Dakota in the #1 Mesa-Twin Mounds-30 well, San Juan County New Mexico.

If you have any objections or comments regarding the commingling please contact the New Mexico Oil Conservation Division as follows:

Mr. Joe Ramy, Director
PO Box 2088
Santa Fe, New Mexico 87501

Thank you for your cooperation.

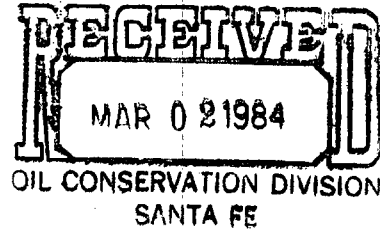
Sincerely,


R.E. Lauritsen

LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87401
TELEPHONE: (505) 327-0331

February 13, 1984

Kelly Family Land Co.
% James J. Kelly
300 S. 4th St.
Suite 410
Las Vegas, Nevada 89101



RE: #1 Mesa-Twin Mounds-30
Section 30, T30N, R14W
San Juan County, New Mexico
790' FNL & 990' FWL

Dear Mr. Kelly,

This is to notify you that Lobo Production is making application for permission to commingle production from the Wildcat Greenhorn and the Basin Dakota in the #1 Mesa-Twin Mounds-30 well, San Juan County New Mexico.

If you have any objections or comments regarding the commingling please contact the New Mexico Oil Conservation Division as follows:

Mr. Joe Ramy, Director
PO Box 2088
Santa Fe, New Mexico 87501

Thank you for your cooperation.

Sincerely,

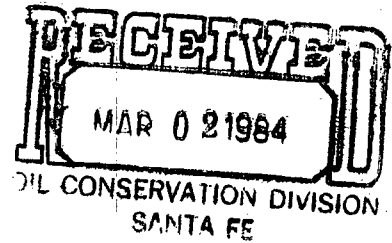
A handwritten signature in cursive script, appearing to read "R.E. Lauritsen".

R.E. Lauritsen

LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87401
TELEPHONE: (505) 327-0331

February 13, 1984

Dugan Production
Box 208
Farmington, NM 87499



RE: #1 Mesa-Twin Mounds-30
Section 30, T30N, R14W
San Juan County, New Mexico
790' FNL & 990' FWL

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If you have any objections or comments regarding the commingling please contact the New Mexico Oil Conservation Division as follows:

Mr. Joe Ramy, Director
PO Box 2088
Santa Fe, New Mexico 87501

Thank you for your cooperation.

Sincerely,

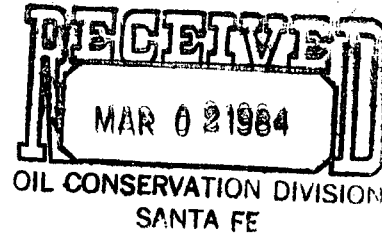
A handwritten signature in cursive script, appearing to read "R.E. Lauritsen".

R.E. Lauritsen

LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87401
TELEPHONE: (505) 327-0331

February 13, 1984

Mountain Fuel
PO Box 11368
Salt Lake City, Utah 84319



RE: #1 Mesa-Twin Mounds-30
Section 30, T30N, R14W
San Juan County, New Mexico
790' FNL & 990' FWL

Dear Sirs:

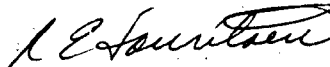
This is to notify you that Lobo Production is making application for permission to commingle production from the Wildcat Greenhorn and the Basin Dakota in the #1 Mesa-Twin Mounds-30 well, San Juan County New Mexico.

If you have any objections or comments regarding the commingling please contact the New Mexico Oil Conservation Division as follows:

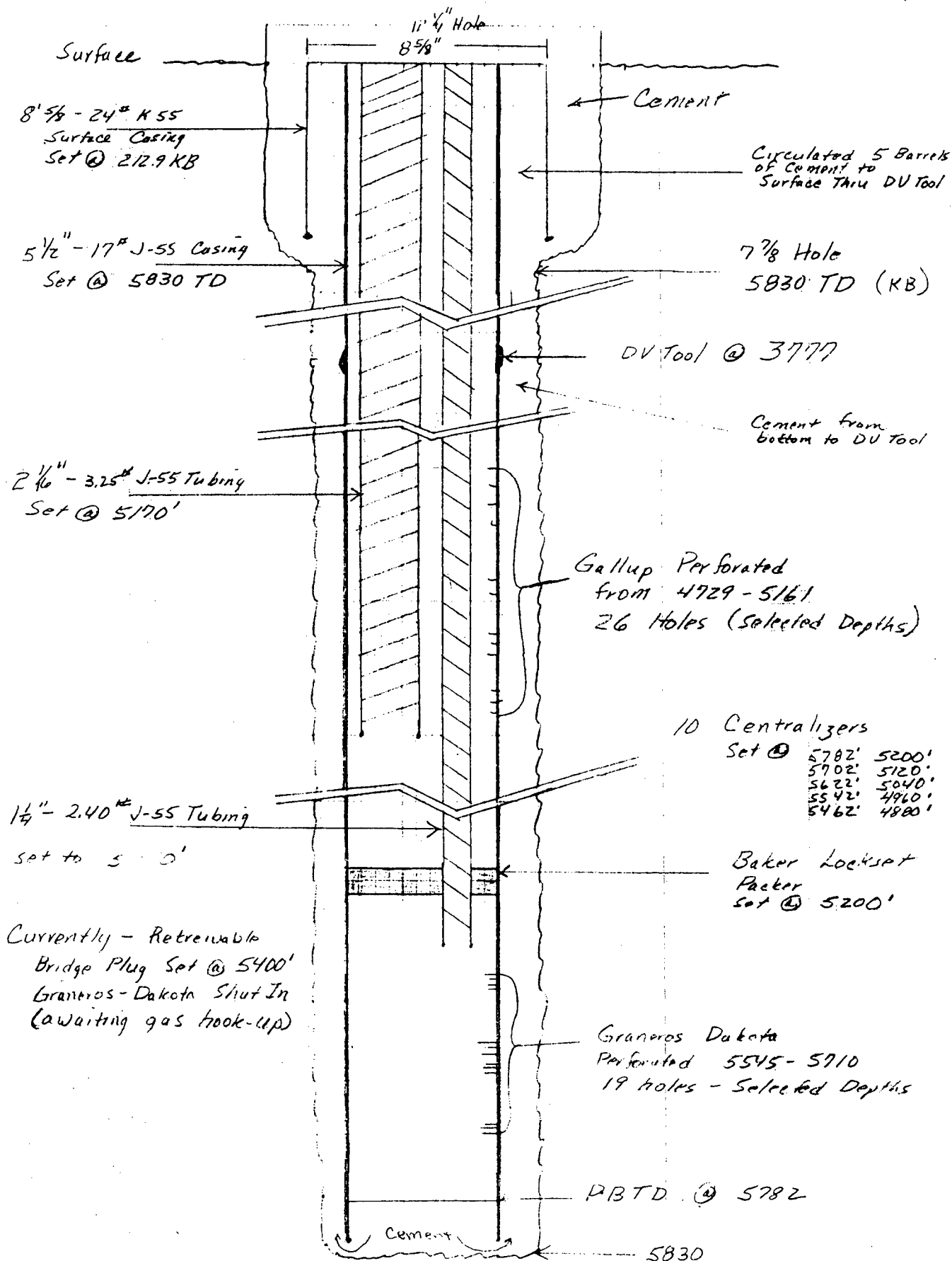
Mr. Joe Ramy, Director
PO Box 2088
Santa Fe, New Mexico 87501

Thank you for your cooperation.

Sincerely,


R.E. Lauritsen

LOBO PRODUCTION #1 Mesa - Twin Mounds
D - Sec 30, T30N, R14W, San Juan County



LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87499
TELEPHONE: (505) 327-0331

July 5, 1984

Mr Joe Ramey
Oil Conservation Division
PO Box 2088
Santa Fe, New Mexico 87501

RE: Administrative Approval^N
Down Hole Commingling
on NM 27024
D, Sec 30, T30N, R14W
#1 Mesa-Twin Mounds-30
L, Sec 30, T30N, R14W
#2 Mesa-Twin Mounds-30
D, Sec 31, T30N, R14W
#1 Mesa-Twin Mounds-31
San Juan County, New Mexico

Dear Mr. Raney:

In our letter dated June 18, 1984, Lobo Production requested down hole commingling of the Gallup and Dakota in the above three referenced wells. In addition to the data submitted with the original application, data from further tests and reports is being submitted with this letter. Because of the similarity of the logs and test on the three wells, it is believed that the data from one well will be applicable to all wells in the area.

It is hereby requested that commingling of the Gallup (Mancos) and Dakota zones be granted on the above three wells and on any future wells to be drilled in Section 30 and the N/2 Section 31, T30N, R14W, San Juan County, New Mexico.

The interest owners (Royalty, Overriding Royalty, and working interest) is the same for both the Gallup and Dakota formations in all the wells and will also be the same for future wells.

Enclosed you will find bottom hole pressure test data from the #2 Mesa-Twin Mounds-30. Bottom hole pressures were as follows:

Gallup 4825'	1100 PSI
Dakota 5550'	1331 PSI

The pressures fall within the 50% limitation and qualifies for commingling on that basis.

Northwest Energy has prepared deliverability studies on both the Gallup and Dakota zones in the #1-30 Mesa Twin Mounds and the #2-30 Mesa-Twin Mounds. It is felt that the Deliverability analysis would be the best data for the allocation of production from each zone. Deliverabilities as per Northwest Energy are as follows:

#1 Mesa-Twin Mounds-30

Dakota	210 MCFPD	74%
Gallup	75 MCFPD	26%

#2 Mesa-Twin Mounds-30

Dakota	52 MCFPD
Gallup	75 MCFPD

#1 Mesa-Twin Mounds-31

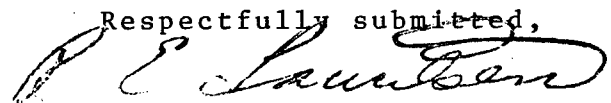
Dakota	58 MCFPD
Gallup	63 MCFPD

The Dakota was making 1 Barrel of Oil per day(46 gravity) from the #1-30 Mesa-Twin Mounds during production tests. It is recommended that 1 BOPD be allocated to the Dakota formation in each well unless production tests of the wells indicate they are producing other quantities of oil.

Surrounding mineral owners were notified by certified letter of the request for commingling. The #1-30 Mesa-Twin Mounds has been hooked up to the El Paso Pipeline system. The Dakota formation will not be produced on a continuous basis because it "logs off" with water and the well has to be blown to the atmosphere in order to unload the water causing a considerable waste of gas besides limiting the amount of gas which can be produced. By commingling the Gallup and Dakota it can be pumped and the gas from the two zones compressed, alleviating the problem of "logging off". The amount of hydrocarbons recovered would definitely be enhanced by the commingling of the two zones.

If you need additional information or have any questions in regard to the data submitted, please feel free to contact me. Thank you for your consideration of this matter.

Respectfully submitted,



R.E. Lauritsen
Partner

RULE 303 C.2 DOWN HOLE COMMINGLING

(a) OPERATOR

Lobo Production
PO Box 2364 (505) 327-0331
Farmington, NM 87499

- (b) Mesa Twin Mounds
Lease # NM 27024
Well # 1-30, 2-30, 1-31
All Section 30, T30N, R14W
N/2 Section 31, T30N, R14W
San Juan County, New Mexico

(c) Figure 1 Attached

- (d) Forms C-116 attached for Gallup zones on all
three wells
No production history

- (e) No decline curves because production history not
available.

- (f) Bottom hole pressures on the #2-30
Graneros-Dakota 5550' 1331 PSI
Gallup 4825' 1100 PSI
(per Tefteller, Inc, report attached)

Because of the closeness in depth and the similarity
in the logs from all three wells, it is assumed that
the bottom hole pressures on all three wells would
be close to the above pressures.

- (g) Specific gravities of the oils are as follows:

Graneros-Dakota	46
Gallup	42

Both oils are paraffin based.

- (h) Problems in producing the Dakota are being encountered
because the Dakota logs off and has to be blown to the
atmosphere. Combined production should be greatly
enhanced since the wells will be pumped, eliminating
the need to blow off the Dakota.
- (i) Northwest Energy (gas purchaser) has done reservoir
evaluations of the wells in order to calculate the
economics of pipeline hookups. They're deliverability
studies are as follows:

WELL	ZONE	1st. Yr. Stab. DELIVERABILITY	TOTAL RESERVES
1-30	Gp	75 MCFGPD	140,000 MCF
1-30	Kd	210 MCFGPD	360,000 MCF
2-30	Gp	75 MCFGPD	140,000 MCF
2-30	Kd	52 MCFGPD	260,000 MCF
1-31	Gp	63 MCFGPD	145,000 MCF
1-31	Kd	58 MCFGPD	250,000 MCF

It is proposed that the gas production be allocated on
a percentage basis, based on the first year stabilized
deliverabilities.

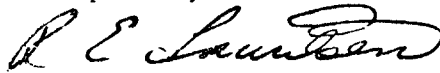
The formula could be as follows:

$$\text{Total Produced} \times \frac{\text{Gallup deliverability}}{\text{Total Gp-Kd deliverability}} = \text{Total Gallup Gas}$$

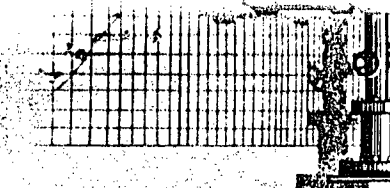
- (j) All offset operators and owners including the BLM were notified on 2-15-84 by certified letter of Lobo Productions intention to commingle Gallup and Dakota zones.

Note: The Greenhorn and Graneros-Dakota zones were mistakenly commingled in the #1-30 Mesa-Twin Mounds. Pressure test on the #2-30 Mesa-Twin Mounds indicate that the Gallup pressures are within 50% of the Dakota pressures.

Prepared by:



R.E. Lauritsen
Partner, Lobo Production



TEFTELLER, INC.

reservoir engineering data

MIDLAND TEXAS / FARMINGTON, NEW MEXICO
GRAND JUNCTION, COLORADO

P. O. Box 5247
Midland, Texas 79704
(915) 682-5574

May 9, 1984

Lobo Production Company
Box 2364
Farmington, New Mexico 87499

Attention: Mr. R. E. Lauritsen

Subject: Bottom Hole Pressure Measurement,
Fluid Level Measurement and Packer
Leakage Test
Mesa Twin Mounds 30 No. 2
San Juan County, New Mexico
Our File No. 2-15419-P,FL&PL

Gentlemen:

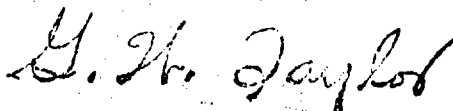
Attached hereto are the results of the bottom hole pressure measurement, fluid level measurement and packer leakage test which were conducted on the above captioned well April 27, 1984.

The data presented are in tabular and graphical form.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please call us at any time.

Respectfully submitted,

TEFTELLER, INC.



G. W. Taylor
Operations Manager

GWT/lw

TEFTELLER, INC.
RESERVOIR ENGINEERING DATA
Midland, Texas

Well : MESA TWIN MOUNDS "30" NO. 2

Page 1 of 4

Field :

File 2-15419-P,FL&PL

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1984 Date	Status of Well	Time	Elapsed Time Hrs.Min.	Daily Rate Gas MCF/D	Wellhead Pressure		BHP @ 5250' Psig	BHP @ 5550' Psig
					Dakota Tubing	Gallup Casing		
4-27	Arrived on location							
"	shut-in 7 days			Not measured				
"	Rig up to run gradient							
"	traverse to 5200'							
"	On bottom	11:25			789	497	1197	1331
"	Open Gallup to flow							
"	(casing)	12:45	0 00					
"	"	13:00	0 15		796	266	1197	1331
"	"	13:15	0 30		795	201	1197	1331
"	"	13:30	0 45		794	160	1197	1331
"	"	13:45	1 00		793	138	1197	1331
"	"	14:00	1 15		792	125	1197	1331
"	"	14:15	1 30		791	118	1197	1331
"	"	14:30	1 45		790	113	1197	1331
"	"	14:45	2 00		788	109	1197	1331
"	"	15:00	2 15		788	105	1197	1331
"	"	15:15	2 30		789	101	1197	1331
"	"	15:30	2 45		789	100	1197	1331
"	Off bottom	15:45	3 00		789	98	1197	1331



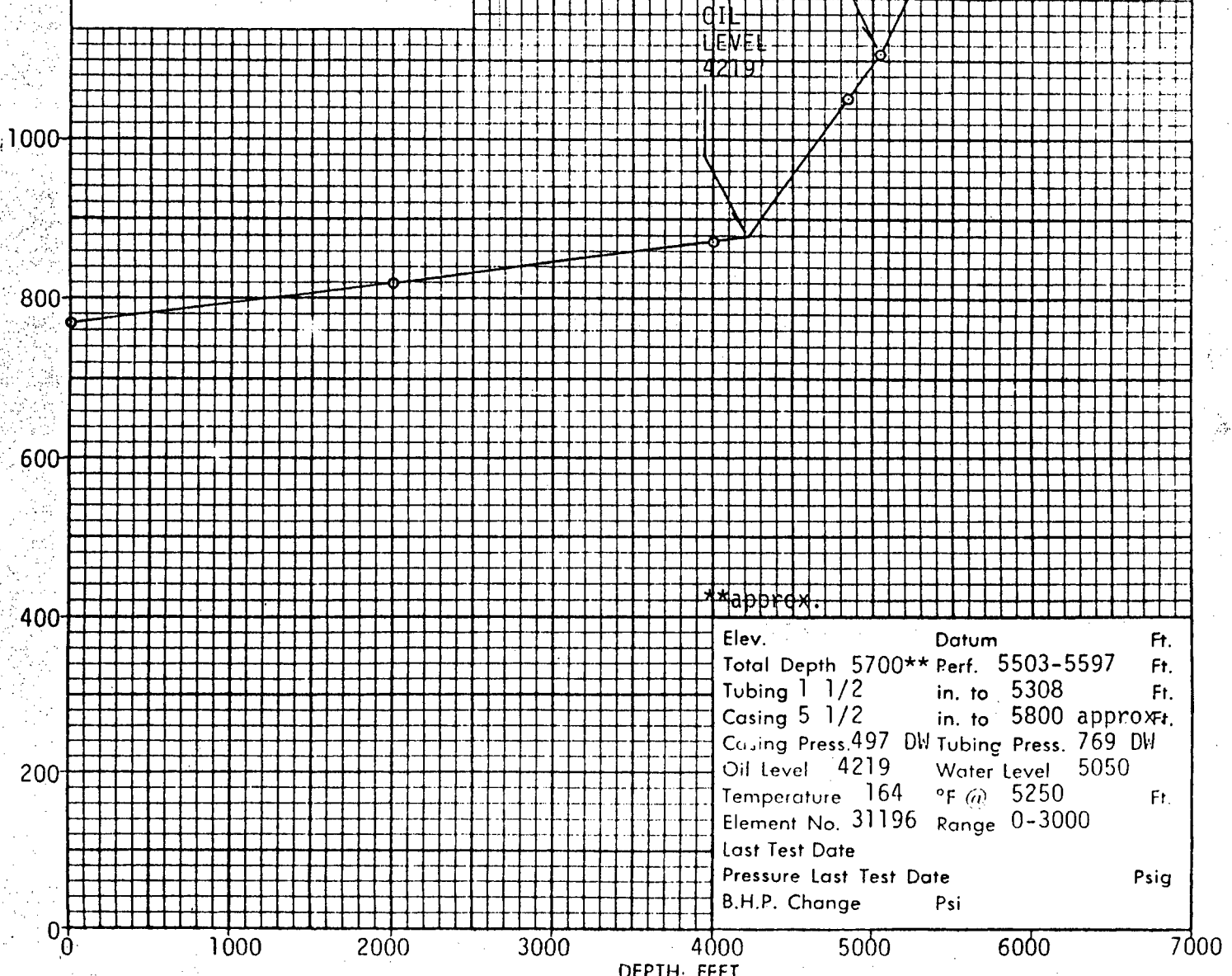
Company LOBO PRODUCTION COMPANY Lease MESA TWIN MOUNDS "30" Well No. 2
Field _____ County SAN JUAN State NEW MEXICO
Formation DAKOTA Test Date APRIL 27, 1984

reservoir engineering data
MIDLAND, TEXAS

Status of Well Shut-in since 4/10/84

DEPTH Feet	PRESSURE Psig	GRADIENT Psi/Ft.
0	770	
2000	818	0.024
4000	873	0.028
4850	1053	0.212
5050	1108	0.275
5250	1197	0.445
5550*	1331	0.445
*Mid-Perf		

Datum Pressure _____ Psig



COMPANY LOBO PRODUCTION COMPANY
FIELD GALLUP

LEASE MESA TWIN MOUNDS "30" WELL NO. 2
COUNTY SAN JUAN STATE NEW MEXICO
TEST DATE APRIL 27, 1984 TIME _____

WELL DATA

FLUID LEVEL REPORT

Elevation _____ feet
Datum _____ feet subsea
Perforations 4607-5044 feet
Test Depth 4825 feet
Tubing Size 2 1/16 in. to 4963 feet
Total Depth _____ feet
Casing Size _____ in. to _____ feet
Packer 5100 feet
Oil Level 1362 feet
Tubing Pressure _____ psig
Well Makes 100 % Oil, _____ % Water
Casing Pressure 497 D.W.T. psig
Status of Well Shut-in
Average Tubing Joint 31.0 feet
Operator _____ Atmospheric Temperature _____ °F
Unit No _____

PRESSURE DATA

		Feet	Gradient Psig/Ft.	Psi
Casing Pressure				497
GAS				
Average Tubing Joints	<u>31.0</u> ft. Joints to Fluid			
	<u>102</u> Feet to Fluid.	3162	0.020	63
OIL				
Fluid Column Length	<u>1663</u> ft. % Oil <u>100</u>			
	Oil Column Length.	1663	0.325	540
WATER				
Fluid Column Length	_____ Ft. % Water _____			
	Water Column Length.			

PRESSURE AT TEST DEPTH

Calculated subsurface pressure at datum depth of _____ feet subsea is _____
Last Test Date _____ Pressure Last Test _____ psig
Remarks: _____
_____ psig
_____ psi

This form is not to
be used for reporting
packer leakage tests
in Southeast New Mexico

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator LOBO PRODUCTION COMPANY Well MESA TWIN MOUNDS "30" No. 2
Location _____
Well: Unit _____ Sec. _____ Twp. _____ Rge. _____ County SAN JUAN

Name of Reservoir or Pool	Type of Prod. (Oil or Gas)	Method of Prod. (Flow or Art. Lift)	Prod. Medium (Tbg. or Csg.)
Gallup	Oil	Pump	Tubing
Dakota	Gas	Flow	Tubing

PRE-FLOW SHUT-IN PRESSURE DATA

Hour, date	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Shut-in 15 days	598		
Shut-in months	901		

FLOW TEST NO. 1

Test commenced at (hour, date)* 10:00 4-10-84 Zone producing (Upper or Lower): Upper

Time (hr, date)	Lapsed time since*	Pressure Upper Compl.	Pressure Lower Compl.	Prod. Zone Temp.	Remarks
15 4-10-84	15 min.	598	35		Heavy oil & water
30 4-10-84	30 min.	601	65		"
45 4-10-84	45 min.	601	52		"
00 4-10-84	1 hour	602	48		"
00 4-10-84	2 hours	602	47		"
00 4-10-84	3 hours	602	43		"

Production rate during test
: BOPD based on Bbls. in Hrs. Grav. GOR
: MCFPD; Tested thru (Orifice or Meter):

MID-TEST SHUT-IN PRESSURE DATA

Hour, date	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Shut-in 32 days	497		
Shut-in 4-10-84 13:00 17 days	789		

FLOW TEST NO. 2

Test commenced at (hour, date)** 12:45 4-27-84 Zone producing (Upper or Lower): Lower

Time (hr, date)	Lapsed time since **	Pressure Upper Compl.	Pressure Lower Compl.	Prod. Zone Temp.	Remarks
00 4-27-84	15 min.	266	786		Bottom hole pressure Dakota Zone
15 4-27-84	30 min.	201	795		@ 5250', 1197 Psig
30 4-27-84	45 min.	160	794		throughout flow test,
45 4-27-84	1 hour	138	793		flowing casing only with BHP
45 4-27-84	2 hours	109	788		lubricator on dakota tubing.
45 4-27-84	3 hours	98	789		

Production rate during test
: BOPD based on Bbls. in Hrs. Grav. GOR
: MCFPD; Tested thru (Orifice or Meter):

REMARKS: _____

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

Witnessed: _____
Oil Conservation Division

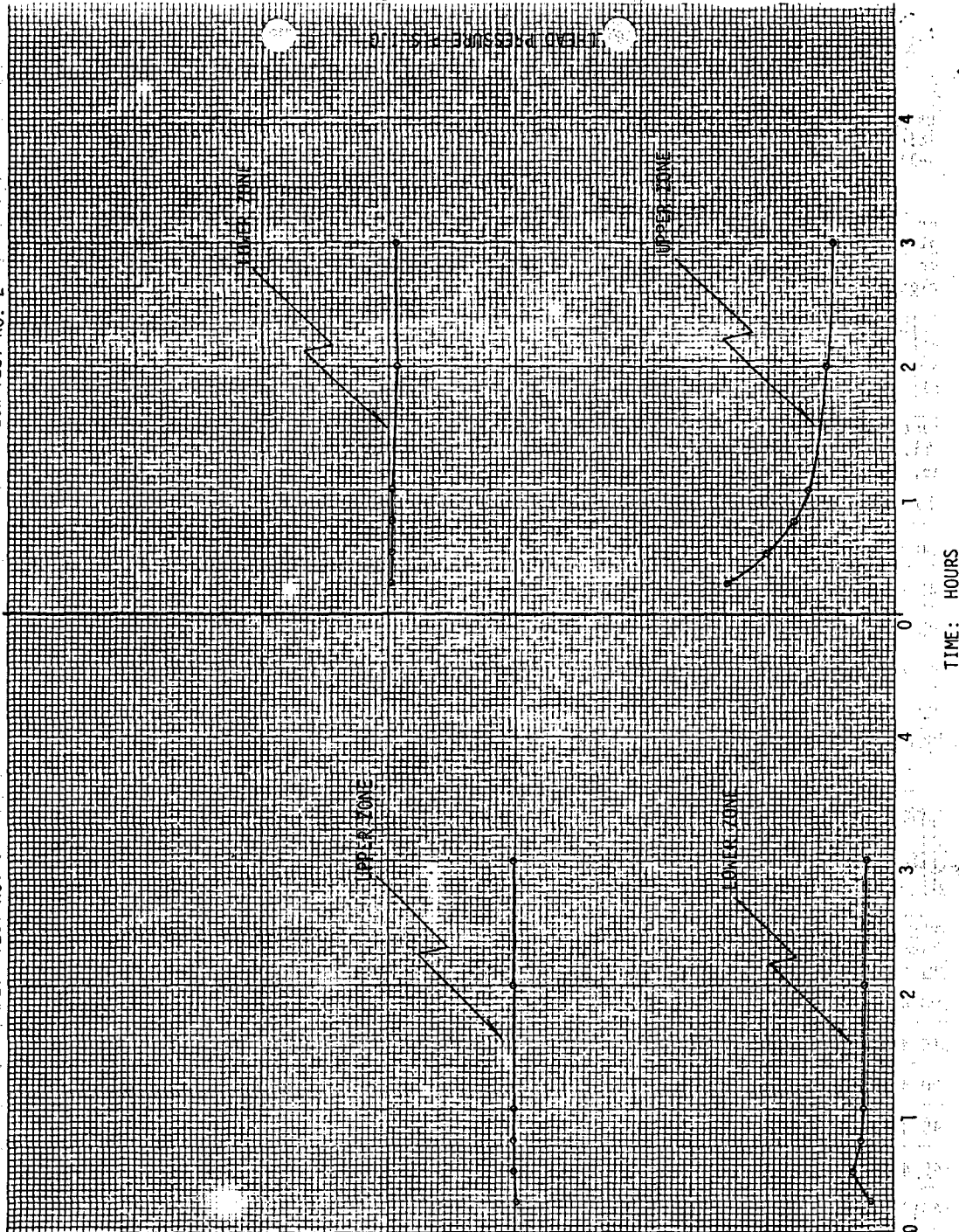
Operator _____

By _____

Title _____

Date _____

FLOW TEST NO. 2

[illegible]

GAS-OIL RATIO TESTS

Operator		Pool		County										
Lobo Production		Wildcat Gallup		San Juan										
Address PO Box 2364 Farmington, NM 87499				Type of Test - (X) ☒ Scheduled ☐ Special										
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	Length of Test in hours	Completion ☐ Special ☐				
		U	S	T						R	WATER BBLs.	PROD. GRAV. OIL BBLs.	DURING TEST GAS M.C.F.	GAS - OIL RATIO CU.FT./BBL
(1) #1 Mesa-Twin Mounds-30	1	D	30	30N	14W	6/23-84	P 1/8"	50#	24	0	42.8	4.6	49.1	10,674:1
#2 Mesa-Twin Mounds-30	2	L	30	30N	14W	6/13-84	P 1/4"	60#	24	0	42.8	7.0	100.9	1,514:1
#1 Mesa-Twin Mounds-31	1	D	31	30N	14W	6/23/84	P 1/4"	25#	24	0	42.8	12.9	53.2	4,124:1

(1) Gas is currently being sold from both Gallup and Dakota Formation (into El Paso Pipelines)

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 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 allowable when authorized by the Division.

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.

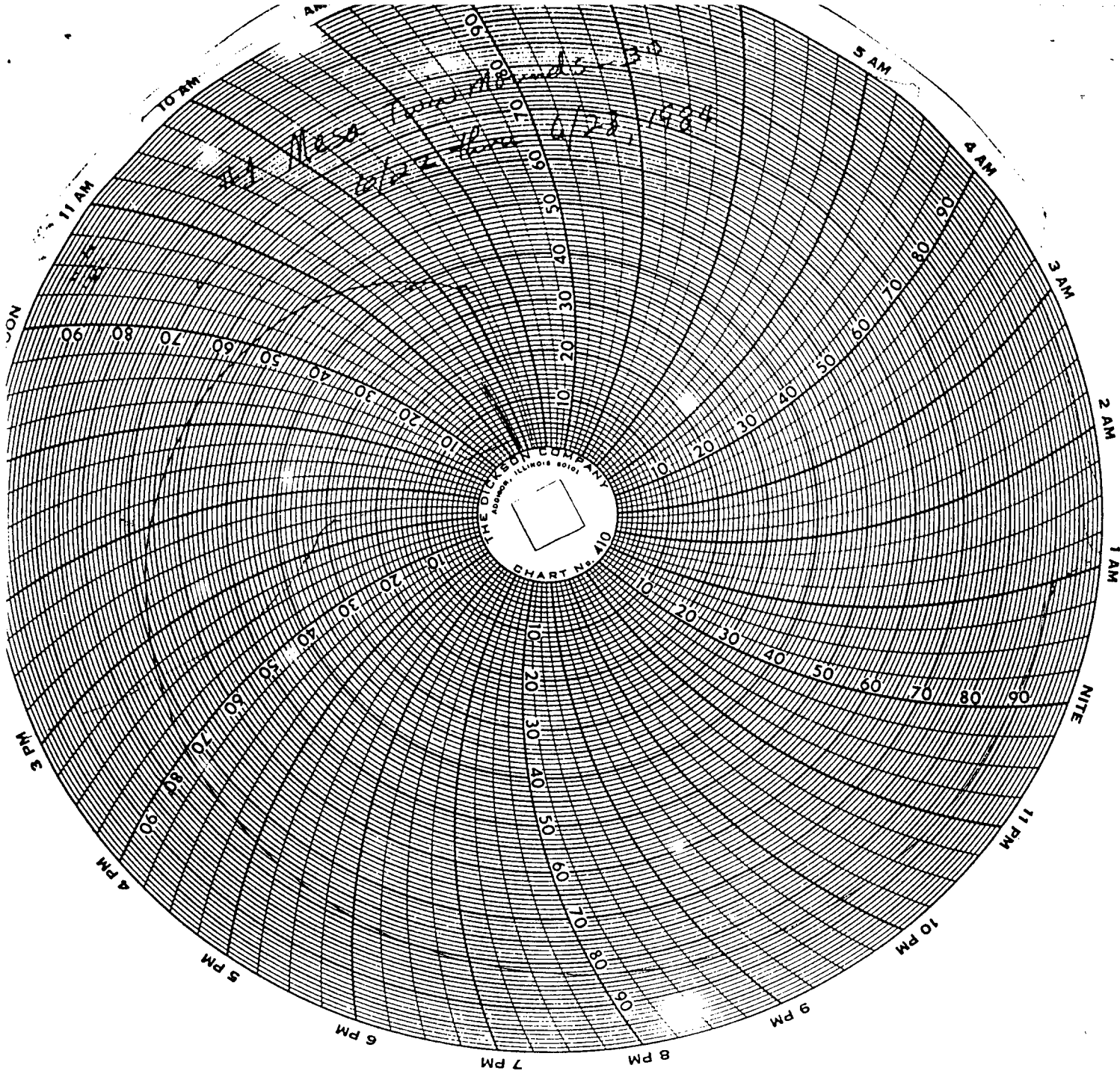
Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 331 and appropriate pool rules.

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



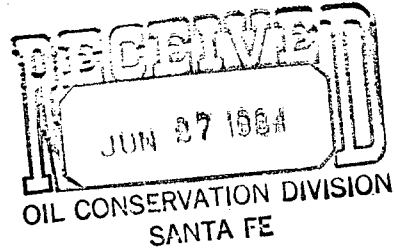
(Signature)
Operator

7-6-84 (Title)



LOBO PRODUCTION
R.E. Lauritsen & Gary Roberts
P.O. BOX 2364
FARMINGTON, NEW MEXICO 87499
TELEPHONE: (505) 327-0331

June 18, 1984



Mr. Joe Ramey
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Administrative Approval Down Hole
Commingling on: NM-27024
Sec. 30, T 30N, R 14W, #1 MESA TWIN MOUNDS-30
Sec. 30, T 30N, R 14W, #2 MESA TWIN MOUNDS-30
Sec. 31, T 30N, R 14W, #1 MESA TWIN MOUNDS-31
San Juan County, New Mexico

Dear Mr. Ramey:

Please accept this letter as an application for approval of Down Hole Commingling on the above referenced wells. The pools to be co-mingled are Wildcat Gallup and Basin Dakota.

Northwest Energy has estimated the future production on the above referenced well to be:

Basin Dakota - 340000MCF 210 MCFPD

Wildcat Gallup-160000MCF 55 MCFPD

Please find attached to this letter other information required by your office. Thank you for your attention to this matter.

Respectfully submitted,



R.E. Lauritsen

REL:ch
Attachments

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P.O. BOX 208
SANTA FE, NEW MEXICO 87501

Form C-116
Revised 10-1-78

GAS-OIL RATIO TESTS

Operator		Pool		County											
Lobo Production		Wildcat Gallup		San Juan											
Address				TYPE OF TEST - (X)		Scheduled ☐		Completion ☒		Special ☐					
PO Box 2364 Farmington, NM 87499															
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL.		
		U	S	T						R	WATER BBL.	GRAV. OIL BBL.		GAS M.C.F.	
Mesa-Twin Mounds	1	D	30	30N	14W	8-17-83	P	1"	50	24	0	42.8	18.9	53.0	2804:1
(see attached)															

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 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 Division.
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.
Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division 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.


(Signature)

Arthur
8-18-83 (Title)

The well is on an intermittent schedule - on 45 minutes five times per day. The well peaks at from 72 psi to 78 psi when it first comes on. The well blows down within 5 minutes of coming on. Based on the above data it is assumed the well flows at 38 psi for five minutes 5 times per day. Gas production for this period would than be as follows.

$$1120 \text{ MCFGPD} \times \frac{25 \text{ min}}{1440 \text{ min}} = 19.4 \text{ McFGPD}$$

During the balance of the 40 minutes, the chart shows a 0-20 psi with most of the time period being 0 psi during the first cycle and 0 psi for about 1/3 of the time during the second and third cycles. The first cycle would have an average psi of 1 and the next two cycles would average 4 psi. Therefore, an average of 3 psi will be used to calculate the gas flow for the remaining 40 minutes. Gas production for the 40 minute periods, 5 times per day is as follows:

$$242 \text{ MCFGPD} \times \frac{200 \text{ min}}{1440 \text{ min}} = 33.6 \text{ MCFGPD}$$

Total gas production with the well open 5 times a day for 45 minutes is 53.0 MCFGPD. The well made 18.9 BO in 24 hours during the test which yields a GOR of 2804:1.

All distances must be from the outer boundaries of the section.

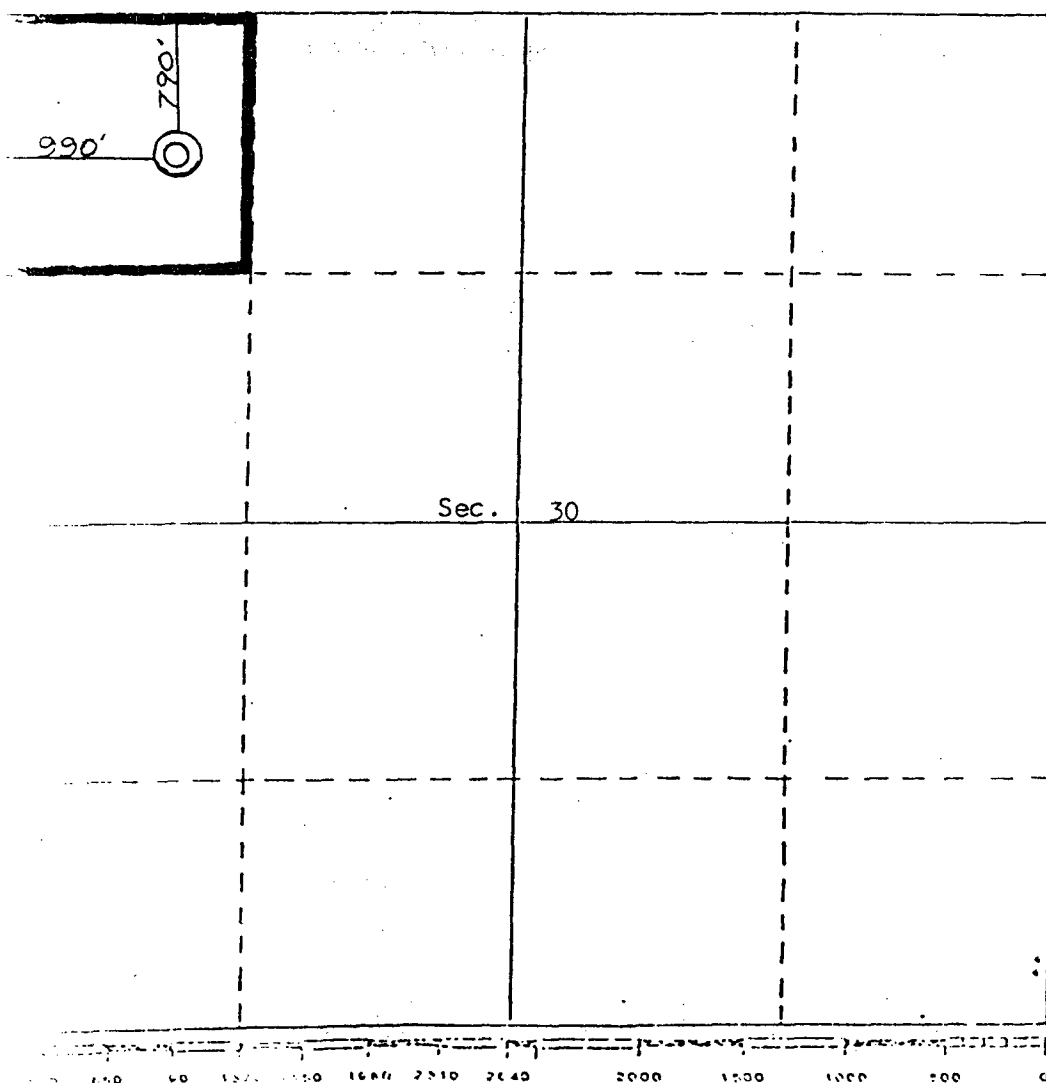
LOBO PRODUCTION			MESA TWIN MOUNDS			1-30		
Section	30	Township	30 NORTH	Range	14 WEST	County	SAN JUAN	
790		feet from the NORTH		990		feet from the WEST		Line
Ground Level Elev.	5492	Producing Formation		Pool		Dedicated Acreage:		Acres
		Gallup		Wildcat		40		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division



CERTIFICATION

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

Name

R.E. Lauritsen

Position

Partner

Company

Lobo Production

Date

June 3, 1983

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

5-11-1983

Deputy Surveyor, N.M. L.M.D. Co.

Registered Professional Engineer

and/or Land Surveyor

Curtis G. Stocking

Certification No. 5980

C. STOCKING

All distances must be from the outer boundaries of the section.

LOBO PRODUCTION

MESA TWIN MOUNTS

10-10

Section	Township	Range	County
30	30 NORTH	14 WEST	SAN JUAN

Section Location of Well:

790	feet from the NORTH	Line and	990	feet from the WEST	Line
and Level Elev.	Producing Formation	Pool	Dedicated Acreage:		
5492	Basin Dakota	Dakota	320		

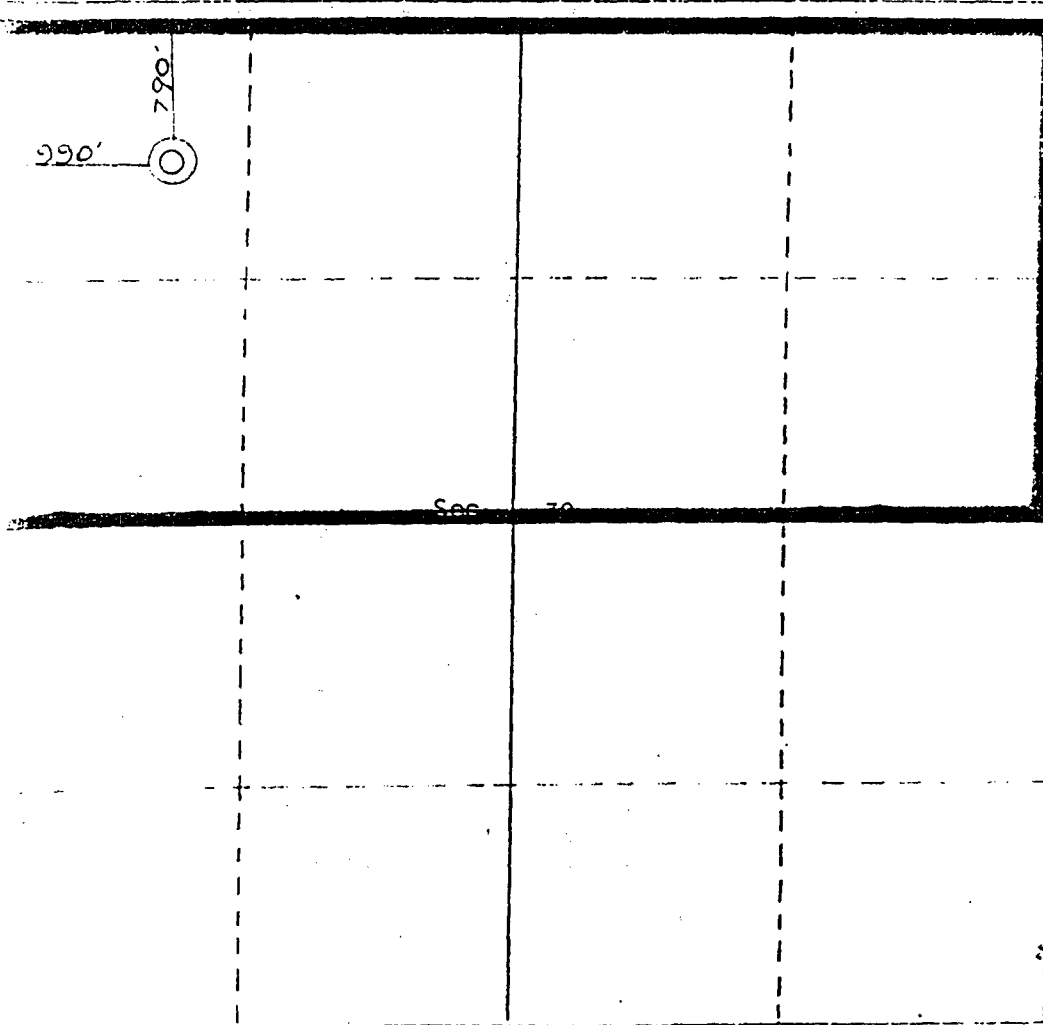
- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to work interest and royalty)
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes
 ☐ No

If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

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

Name
R.E. Lauritsen

Position
Partner

Company
Lobo Production

Date
June 3, 1983

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

5-11-1985

State Surveyor
Curtis G. Stocking
Registered Professional Land Surveyor
and Vol. Land Surveyor
5980

2b. OFFset Leases

T30N, R14W, Sec. 19-20
T30N, R15W, Sec. 24 N/2 Sec. 25

Mountain Fuel
PO Box 11368
Salt Lake City Utah 84139

Above acreage farmed out to

Dugan Productions
Box 208
Farmington, NM 87499

T30N, R14W, Sec. 32

MTS Limited Partnership
Mesa Petroleum
General Partner
1660 Lincoln, Suite 2800
Denver, CO 80264

T30N, R14W, Sec. 29

Tenneco
PO Box 2511
Huston, Texas 77001

T30N, R15W, Sec. 36

El Paso Natural Gas
PO Box 4289
Farmington, NM 87499

T30N, R15W, S/2 Sec. 25

Kelly Family Land Co.
% James J. Kelly
300 S. 4th. St.
Suite 410
Las Vegas, Nevada 89101

T30N, R14W S/2 Sec 31

City Service Co.
1600 Broadway
Suite 900
Denver, Colorado 80207

Notification of commingling was sent to the above on February 13, 1984.

TEFTELLER, INC.

reservoir engineering data

MIDLAND, TEXAS / FARMINGTON, NEW MEXICO
GRAND JUNCTION, COLORADOP. O. Box 5247
Midland, Texas 79704
(915) 682-5574

November 7, 1983

Lobo Production Company
Box 2364
Farmington, New Mexico 87499

Attention: Mr. R. E. Lauritsen

Subject: Absolute Open Flow Potential
Measurement & Packer Leakage Test
Mesa Twin Mound "30" No. 1
San Juan County, New Mexico
Our File No. 2-13993-AOF&PL

Gentlemen:

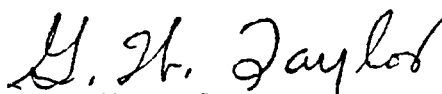
Attached hereto are the results of an absolute open flow potential measurement and a packer leakage test which was conducted on the above captioned well October 6, 1983.

The data presented are in tabular and graphical form.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please call us at any time.

Respectfully submitted,

TEFTELLER, INC.


G. W. Taylor
Operations Manager

GWT/lw

TEFTELLER, INC.
RESERVOIR ENGINEERING DATA
Midland, Texas

Well : A TWIN MOUND "30" NO. 1

Page 1 of 4

Field : BASIN DAKOTA

File 2-13993-BU&AOF

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1983 Date	Status of Well	Time	Elapsed Time		Daily Rate Gas MCF/D	Wellhead Pressure	
			Hrs.	Min.		Dakota	Gallup
10-6	Arrived on location, shut-in	08:10	7 days				
"	Conduct 3 hour AOF and Packer						
"	Leakage Test	09:35					
"	Open on 3/4"x2"x6" positive						
"	choke*	09:35	0	00		1300	500
"	"	09:50	0	15	3986	272	500
"	"	10:05	0	30	3240	220	500
"	"	10:20	0	45	2414	162	501
"	**	10:35	1	00	1877	124	502
"	"	11:05	1	30	1433	92	502
"	"	11:35	2	00	1091	68	502
"	"	12:05	2	30	982	60	502
"	"	12:35	3	00	846	50	502

*Heavy mist to surface 5 minutes into test

**Light mist to surface for duration of test

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-6-83	
Company Lobo Production Company				Connection		
Pool Basin Dakota				Formation Dakota		Unit
Completion Date		Total Depth		Plug Back TD 5782	Elevation 5505KB	Farm or Lease Name Mesa-Twin Mound "30"
Csq. Size 5 1/2	Wt. d	Set At 5830	Perforations: From 5617 To 5710		Well No. 1	
Tbg. Size 1 1/2	Wt. d	Set At 5550	Perforations: From To		Unit Sec. Twp. Rje. D 30 30N 14W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple					Packer Set At 5200	
Producing Thru		Reservoir Temp. °F @		Mean Annual Temp. °F		Baro. Press. - P _a
L		H	G _g	% CO ₂	% N ₂	% H ₂ S
					Prover	Meter Run Taps
					Pos. ck.	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1300				
1.	2" x 3/4"						50	60			3 hours
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	11.0		62	1.000	1.240	1.000	845.7
2.							
3.							
4.							
5.							

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

P _c 1312	P _c ² 1721	3				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0291$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0217$
1		220	48.6	1672.7		
2						
3						
4						
5						

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 864.1$$

Absolute Open Flow	864.1	Mcfd @ 15.025	Angle of Slope @	53.13	Slope, n	.75
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Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
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This form is not to
be used for reporting
packer leakage tests
in Southeast New Mexico

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Lobo Production Company Lease Mesa Twin Mound "30" Well No. 1
Location _____
of Well: Unit D Sec. 30 Twp. 30N Rge. 14W County San Juan
Name of Reservoir or Pool _____ Type of Prod. _____ Method of Prod. _____ Prod. Medium _____
(Oil or Gas) (Flow or Art. Lift) (Tbg. or Csg.)
Upper Completion Gallup oil pump 2 1/16" tubing
Lower Completion Dakota gas flow 1 1/2" tubing

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Compl	Hour, date	Shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
	09:00	9/29/83	7 days	500	yes
Lower Compl	Hour, date	Shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
	09:00	9/29/83	7 days	1300	yes

FLOW TEST NO. 1

Commenced at (hour, date)* 09:35 10/6/83 Zone producing (Upper or Lower): Lower

Time (hour, date)	Lapsed time since*	Pressure		Prod. Zone Temp.	Remarks
		Upper Compl.	Lower Compl.		
09:50	0:15	500	272	60 °F	Flowing at slight
10:05	0:30	500	220	60 °F	Mist throughout
10:20	0:45	501	162	60 °F	Test
10:35	1:00	502	124	60 °F	
11:35	2:00	502	68	60 °F	
12:35	3:00	502	50	60 °F	

Production rate during test

Oil: _____ BOPD based on _____ Bbls. in _____ Hrs. _____ Grav. _____ GOR _____
Gas: _____ MCFPD; Tested thru (Orifice or Meter): _____

MID-TEST SHUT-IN PRESSURE DATA

Upper Compl	Hour, date	Shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
	09:00	9/29/83	14 days	621	Yes
Lower Compl	Hour, date	Shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
	12:35	10/6	7 days	1148	Yes

FLOW TEST NO. 2

Commenced at (hour, date)** 09:00; 10-13-83 Zone producing (Upper or Lower): Upper

Time (hour, date)	Lapsed time since **	Pressure		Prod. Zone Temp.	Remarks
		Upper Compl.	Lower Compl.		
10/13 09:00	Shut-in	621	1148		
10/13 09:15	15 min.	30	1148		
10/14 09:00	24	30	1167		

Production rate during test

Oil: 90 BOPD based on _____ Bbls. in _____ Hrs. _____ Grav. _____ GOR _____
Gas: _____ MCFPD; Tested thru (Orifice or Meter): _____

REMARKS:

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

Approved: _____ 19 _____
Oil Conservation Division

Operator _____

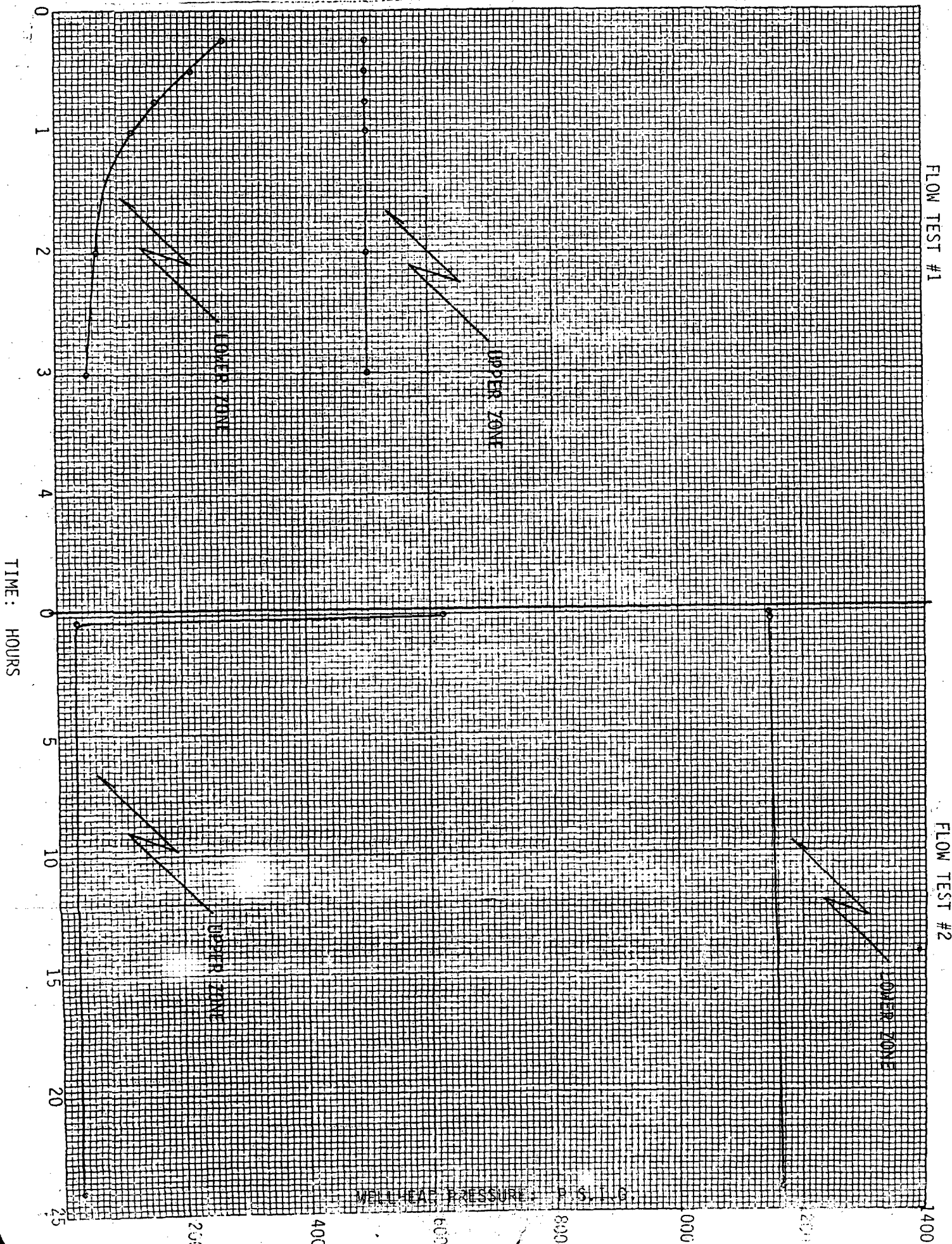
By _____

Title _____

Date _____

Title _____

1. A packer leakage test shall be commenced on each multiply completed well within seven days after actual completion of the well, and annually thereafter as prescribed by the order authorizing the multiple completion. Such tests shall also be commenced on all multiple completions within seven days following recompletion and/or chemical or fracture treatment, and whenever remedial work has been done on a well during which the packer or the tubing have been disturbed. Tests shall also be taken at any time that communication is suspected or when requested by the Commission.
2. At least 72 hours prior to the commencement of any packer leakage test, the operator shall notify the Commission in writing of the exact time the test is to be commenced. Offset operators shall also be so notified.
3. The packer leakage test shall commence when both zones of the dual completion are shut-in for pressure stabilization. Both zones shall remain shut-in until the well-head pressure in each has stabilized, provided however, that they need not remain shut-in more than seven days.
4. For Flow Test No. 1, one zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. Such test shall be continued for seven days in the case of a gas well and for 24 hours in the case of an oil well. Note: If, on an initial packer leakage test, a gas well is being flowed to the atmosphere due to the lack of a pipeline connection the flow period shall be three hours.
5. Following completion of Flow Test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.
6. Flow Test No. 2 shall be conducted even though no leak was indicated during Flow Test No. 1. Procedure for Flow Test No. 2 is to be the same as for Flow Test No. 1 except that the previously produced zone shall remain shut-in while the zone which was previously shut-in is produced.
7. Pressures for gas-zone tests must be measured on each zone with a deadweight pressure gauge at intervals as follows: 3-hour tests: immediately prior to the beginning of each flow-period, at fifteen-minute intervals during the first hour thereof, and at hourly intervals thereafter, including one pressure measurement immediately prior to the conclusion of each flow period. 7-day tests: immediately prior to the beginning of each flow period, at least one time during each flow period (at approximately the midway point) and immediately prior to the conclusion of each flow period. Other pressures may be taken as desired, or may be requested on wells which have previously shown questionable test data.
- 24-hour oil zone tests: all pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges the accuracy of which must be checked at least twice, once at the beginning and once at the end of each test, with a deadweight pressure gauge. If a well is a gas-oil or an oil-gas dual completion, the recording gauge shall be required on the oil zone only, with deadweight pressure: as required above being taken on the gas zone.
8. The results of the above-described tests shall be filed in triplicate within 15 days after completion of the test. Tests shall be filed with the Aztec District Office of the New Mexico Oil Conservation Commission on Northwest New Mexico Packer Leakage Test Form Revised 11-1-58, with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only). A pressure versus time curve for each zone of each test shall be constructed on the reverse side of the Packer Leakage Test Form with all deadweight pressure points taken indicated thereon. For oil zones, the pressure curve should also indicate all key pressure changes which may be reflected by the recording gauge charts. These key pressure changes should also be tabulated on the front of the Packer Leakage Test Form.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL: a. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____		b. TYPE OF WELL: ELL ☐ OAN WELL ☒ DRY ☐ Other _____	
2. NAME OF OPERATOR LOBO PRODUCTION			
3. ADDRESS OF OPERATOR P.O. Box 2364, Farmington, New Mexico			
4. LOCATION OF WELL. (Report location clearly and in accordance with any State requirements) At surface 790' FNL 990' FWL At top prod. interval reported below Same At total depth Same			
14. PERMIT NO.			
15. DATE SPUDDED 6-28-83			
16. DATE T.D. REACHED 7-5-83			
17. DATE COMPL. (Ready to produce) 7-18-83			
18. ELEVATIONS (DF, REB, RT, OR, ETC.)* 5505 KB			
19. ELEV. CASINGHEAD 5492'			
20. TOTAL DEPTH, MD & TVD 5830'			
21. PLUG, BACK T.D., MD & TVD 5782'			
22. IF MULTIPLE COMPL. HOW MANY* 2			
23. INTERVALS DRILLED BY 0-5830			
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 5545'-5710' Graneros Dakota			
25. TYPE ELECTRIC AND OTHER LOGS RUN Duel Induction, Spontaneous Potential Compensated Density, Dual Spaced Neutron, Gamma Ray, Gas Spectrum			
26. WAS DIRECTIONAL SURVEY MADE Yes			
27. WAS WELL CORED No			
28. CASING RECORD (Report all strings set in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH-SET (MD)	HOLE SIZE
8 5/8"	24# K55	212.90 KB	12 1/4"
5 1/2"	17.0# J55	5830'	7 7/8"
CEMENTING RECORD			
150 sks cls. B (127.12 cu ft)			
400 sks cls. B (544 cu ft)			
200 sks cls. B (320 cu ft)			
AMOUNT PULLED			
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
30. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
2 3/8	4730'	5400' RBP	
31. PERFORATION RECORD (Interval, size and number)			
See Attachment			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
5617-5710		500 gals. 15% HCL, 110,000# 20/40 in 85,500 gls gel H2O	
33. PRODUCTION			
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	
Temp. Bridge Plug		Flowing	
WELL STATUS (Producing or shut-in)		Shut In	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD
7-13	24	1/2"	0
FLOW. TUBING PRESS.	CASINO PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.
80 lbs.	660 lbs.	0	572 MCF est.
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)			
Vented and set temporary bridge plug			
35. LIST OF ATTACHMENTS			
Perforation and Cement Record			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED <i>R. E. Chantren</i>		TITLE <i>Partner - Operator</i>	
DATE <i>8-5-83</i>		DATE <i>AUG 22 1983</i>	

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

OPERATOR

FARMINGTON RESOURCE AREA
FARMINGTON, NEW MEXICO

BY *AKC*

Perforations Dakota:

5545, 5549, 5550, 5552, 5618, 5619, 5620, 5621, 5622, 5623, 5634,
5635, 5636, 5637, 5638, 5639, 5640, 5708, 5710.

Cement Record and Additives:

Cemented in 2 stages, 1st stage 400 sks (544 cuft) Class B with 6 1/4% /sk gil-
sonite, 1/4% /sk Floseal, 8% /sk salt
2nd Stage: 200 sks (320 cuft) Class B 65/35 poz, with 12% gel, 10% /sk
gilsonite followed by 400 sks (848 cuft) 65/35 poz with 6% gel, 10% /sk gilsonite,
followed by 50 sks. (59 cuft.) Class B neat

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved
Budget Bureau No. 42-10365

5. LEASE DENOMINATION AND SERIAL NO.

NM-27024

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

NA

7. UNIT AGREEMENT NAME

NA

8. FARM OR LEASE NAME

Mesa Twin Mounds

9. WELL NO.

01

10. FIELD AND POOL, OR WILDCAT

Wc Gallup-Basin Dakota

11. SEC. T. R. M. ON BLOCK AND SURVEY OR AREA

Sec. 30, T 30N, R 14W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mex.

WELL COMPLETION OR RECOMPLETION

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

2. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. REATE. ☐ Other ☐

3. NAME OF OPERATOR

LOBO PRODUCTION

4. ADDRESS OF OPERATOR

P.O. Box 2364, Farmington, New Mexico

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface 790' FNL 990' FWL

At top prod. interval reported below Same

At total depth Same

14. PERMIT NO.

AUG 8 1983

RECEIVED
AUG 8 1983
U.S. GEOLOGICAL SURVEY
FARMINGTON, N.M.

15. DATE SPUNDED

6-28-83

16. DATE T.D. REACHED

7-5-83

17. DATE COMPL. (Ready to prod.)

7-18-83

18. ELEVATIONS (DP, RKB, RT, OR, ETC.)

5505 KB

19. ELEV. CASINGHEAD

5492'

20. TOTAL DEPTH, MD A

5830'

21. PLUG, BACK T.D., MD & TVD

5782'

22. IF MULTIPLE COMPL., HOW MANY?

2

23. INTERVALS DRILLED BY

ROTARY TOOLS

0-5830

CABLE TOOLS

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

4729-5161' Gallup

5545-5710' Graneros Dakota

25. WAS DIRECTIONAL SURVEY MADE

Yes

26. TYPE ELECTRIC AND OTHER LOGS—RUN

Dual Induction, Spontaneous Potential

27. WAS WELL CORED

No

Compensated Density, Dual Spaced Neutron, Gamma Ray, Gas Spectrum

CASINO RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	240 K55	212 90KB	12 1/4"	150 sks. cls. B (127.12 cu.ft.)	
5 1/2"	17.00 J55	5830'	7 7/8"	400 sks cls. B (544 cu.ft.)	
				00 sks. cls. B (320 cu.ft.)	

28. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	4730'	5400' RBP

29. PERFORATION RECORD (Interval, size and number)

See attachment

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5617-5710	500 gals 15% HCl, 110,000# 20/40 in 85,5000 gls gel H2O
4724-5160	500 gals 10% Acetic, 230,000 20/40 in 70Q Foam, 45,000 ga

31. PRODUCTION - Water, 2.510 Mil SQF Nirtoge

32. DATE FIRST PRODUCTION 7-18-83 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) Producing Gallup Shut in Dakota

DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL-OIL RATIO
7-26-83	24	1/2"		45	150	0	3.333
NOV. TUBING PRESS.	CASINO PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
50#	375		4580	150	0		49

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

Vented

TEST WITNESSED BY
Gary Roberts

34. LIST OF ATTACHMENTS

Logs mailed direct by Logging Company

ACCEPTED FOR RECORD

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

SIGNED U.E. Lumberton TITLE operator DATE 8-3-83

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

FARMINGTON COPY

FARMINGTON RESOURCE AREA
FARMINGTON, NEW MEXICO

BY SK

INSTRUCTIONS

This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions. and prior to the time this summary report is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.). formation pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments be listed on this form, see item 35.

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

2. Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. 2 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval(s), top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

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

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

MANY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
ture Cliff	948	1131	Sandstone-H2O-trace of gas
CIA	1632	1875	Sandstone & Shale-H2O
ff House	1930	1983	Sandstone-H2)-Trace of Oil
nt Lookout	3423	3734	Sandstone-H2O-Trace of Gas
cos	3734	4720	Shale
lup	4720	4990	Sandstone, Shale, Oil & Gas
er Gallup	4990	5272	Sandstone, Shale Oil & Gas
enhorn	5499	5562	Linestone & SS Gas
metos Dakota	5608	TD	Sandstone Gas
	5830		

38. GEOLOGIC MARKERS	
NAME	TOP
ACCEPTED FOR RECORD	
AUG 0 8 1983	
FARMINGTON RESOURCE AREA FARMINGTON, NEW MEXICO	
BY	RECEIVED
	AUG 5 1983
	U. S. GEOLOGICAL SURVEY FARMINGTON, N. M.

OPERATOR

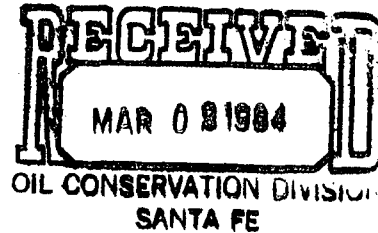


STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

TONEY ANAYA
GOVERNOR

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

February 29, 1984



Mr. R. E. Lauritson
Lobo Production
P.O. Box 2364
Farmington, NM 87499

Re: Downhole Commingle Request for Mesa Twin Mounds #1
D-30-30N-14W

Dear Dick:

The referenced request cannot be approved administratively because of inadequate data. We will allow ninety day authority to produce this well as a commingled well, while you gather bottom hole pressure data from an offset well. This authority will expire May 15, 1984.

If you have any questions, please contact this office.

Sincerely,

Frank T. Chavez
District Supervisor

FTC/dj

cc: Gilbert Quintana ✓



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE July 26, 1984

RE: Proposed MC _____
Proposed DHC α _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated July 5, 1984
for the Kobco Production Mea Surin Monte 30#1 D-30-30N-14W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours truly,

Frank D. Chay

