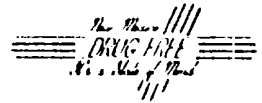




STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

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

Date: 11/2/92

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: Proposed MC _____
Proposed NSL _____
Proposed WFX _____
Proposed NSP _____

Proposed DHC X _____
Proposed SWD _____
Proposed PMX _____
Proposed DD _____

Gentlemen:

I have examined the application received on 10/30/92
for the Clareal Revised Unit # 1E
OPERATOR LEASE & WELL NO.

G-30-29N-6W and my recommendations are as follows:
UL-S-T-R

Approve

Yours truly,

3. J.

Unocal Oil & Gas Division
Unocal Corporation
3300 North Butler Avenue
Suite 200
Farmington, New Mexico 87401
Telephone (505) 326-7600
Fax: (505) 326-6145



October 29, 1992

CERTIFIED RETURN RECEIPT REQUESTED

Farmington District

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay

RECEIVED
OCT 30 1992
OIL CON. DIV.
DIST. 3

Dear Mr. LeMay:

Union Oil Company of California (UNOCAL) requests permission to downhole commingle production from the Blanco Mesaverde and Basin Dakota formations in the following well:

Rincon Unit No. 1 E
1615' FNL, 1830' FEL
Section 30, T27N, R6W
Rio Arriba County, New Mexico

As required for an exception to rule 303-A, the following information is attached:

1. An acreage dedication plat showing offset lease ownership.
2. A Form C-116 showing current productivity from each zone.
3. A wellbore diagram with completion detail.
4. A measured bottomhole pressure from each zone and a calculated adjustment to a common datum.
5. Gas analyses from each zone.
6. An allocation formula for commingled production.
7. A copy of the notification letter sent to all offset operators.

The Blanco Mesaverde formation is uneconomic to drill as a stand alone well. To develop these reserves, a dual or commingled completion is required. We estimate an ultimate recovery of approximately 750 MMCF from the Mesaverde horizon, which would otherwise remain undeveloped.

UNOCAL wishes to commingle the production from the Blanco Mesaverde and Basin Dakota formations in order to more effectively lift condensate production and justify installation of compression facilities. This will result in incremental reserves for both formations.

Both zones are of common ownership and produce essentially dry gas. Therefore, the respective formation fluids are compatible. Also, no crossflow will occur between the commingled zones.

If you have any questions, please contact Dana Delventhal at (505)326-7600. Thank you for your consideration in this matter.

Sincerely,

Union Oil Company of California
dba UNOCAL



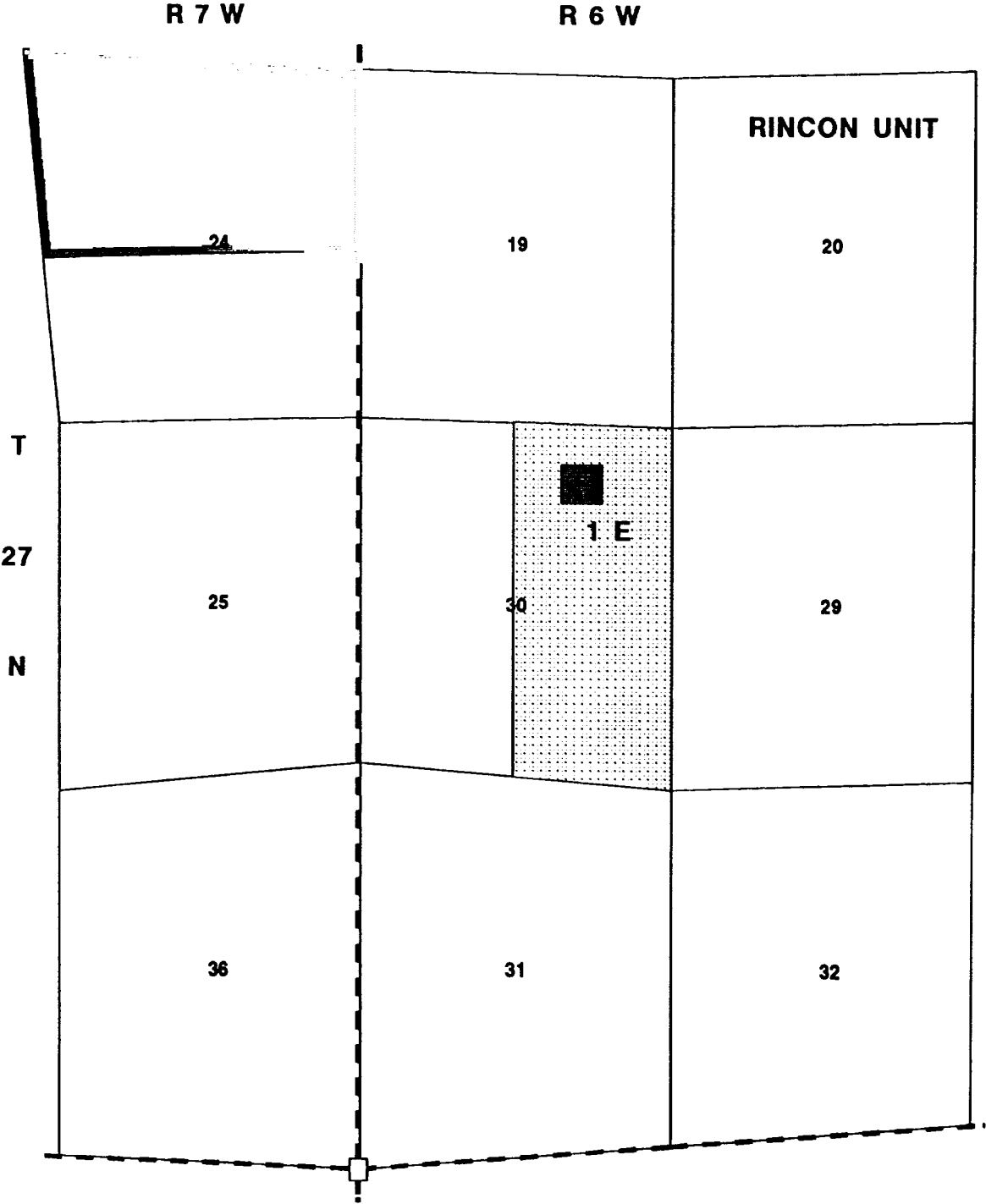
William L. Irwin
District Petroleum Engineer

Attachments

WLI/DLD/df

cc: New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

OFFSET LEASE OWNERSHIP



Submit 2 copies to Appropriate District Office.

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-116
Revised 1/1/89

GAS - OIL RATIO TEST

Operator		Pool		County										
Union Oil Company of California		Blanco Mesaverde/Basin Dakota		Rio Arriba										
Address		TYPE OF TEST - (X)		Completion ☒ Special ☐										
3300 N. Butler, Suite 200, Farmington, NM 87401		SCHEDULED												
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 BBLs.	GRAV. OIL		OIL BBLs.
Rincon Unit	1E	G	30	27	6	9/21/92	F	48/64"	300	24	4	0	457	-
Blanco Mesaverde						9/14/92	F	48/64"	280	24	16	0	748	-
Basin Dakota														

Instructions:

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.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

W.L. Irwin

Signature

W.L. Irwin District Petroleum Engineer

Printed name and title

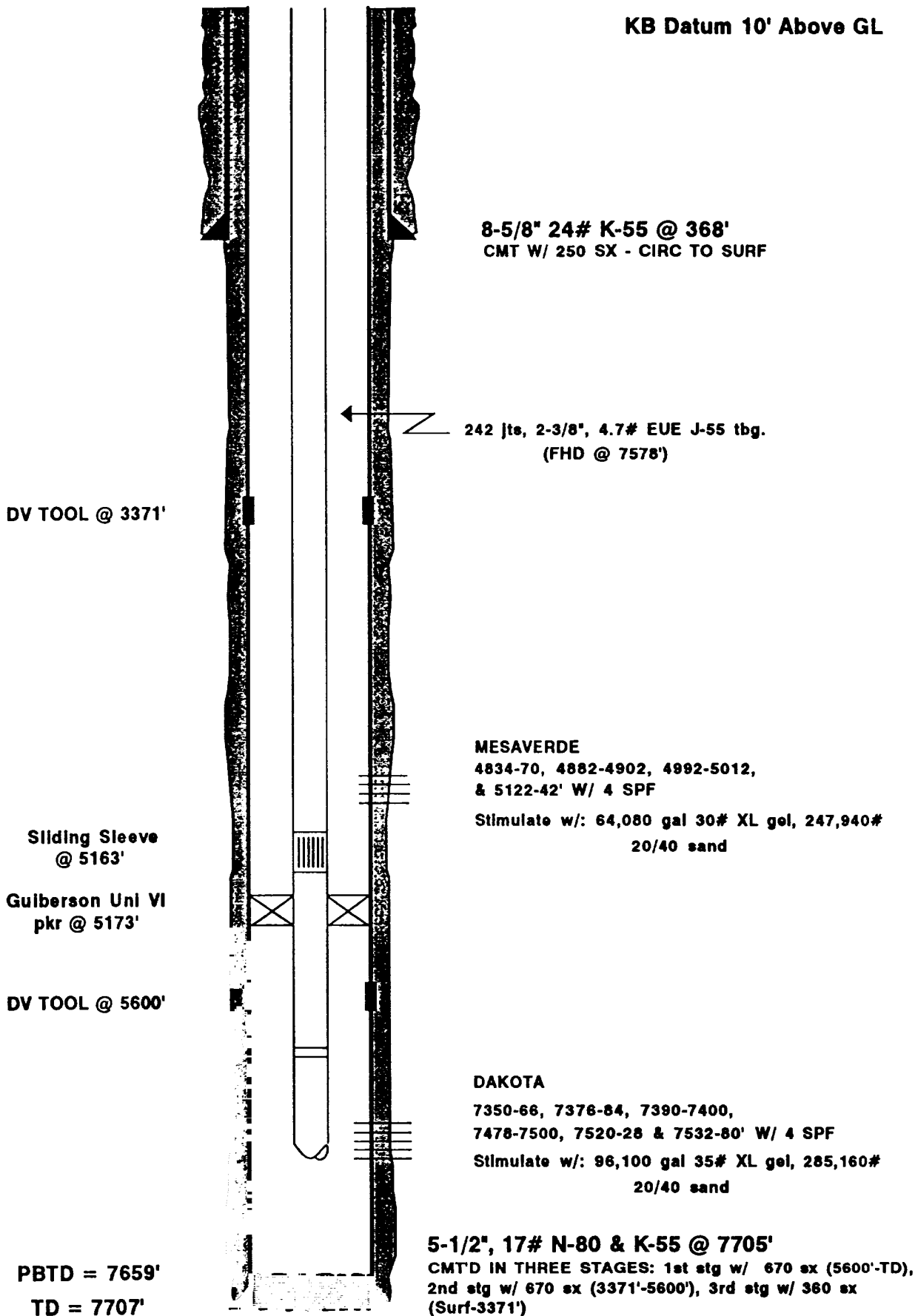
10/29/92

Date

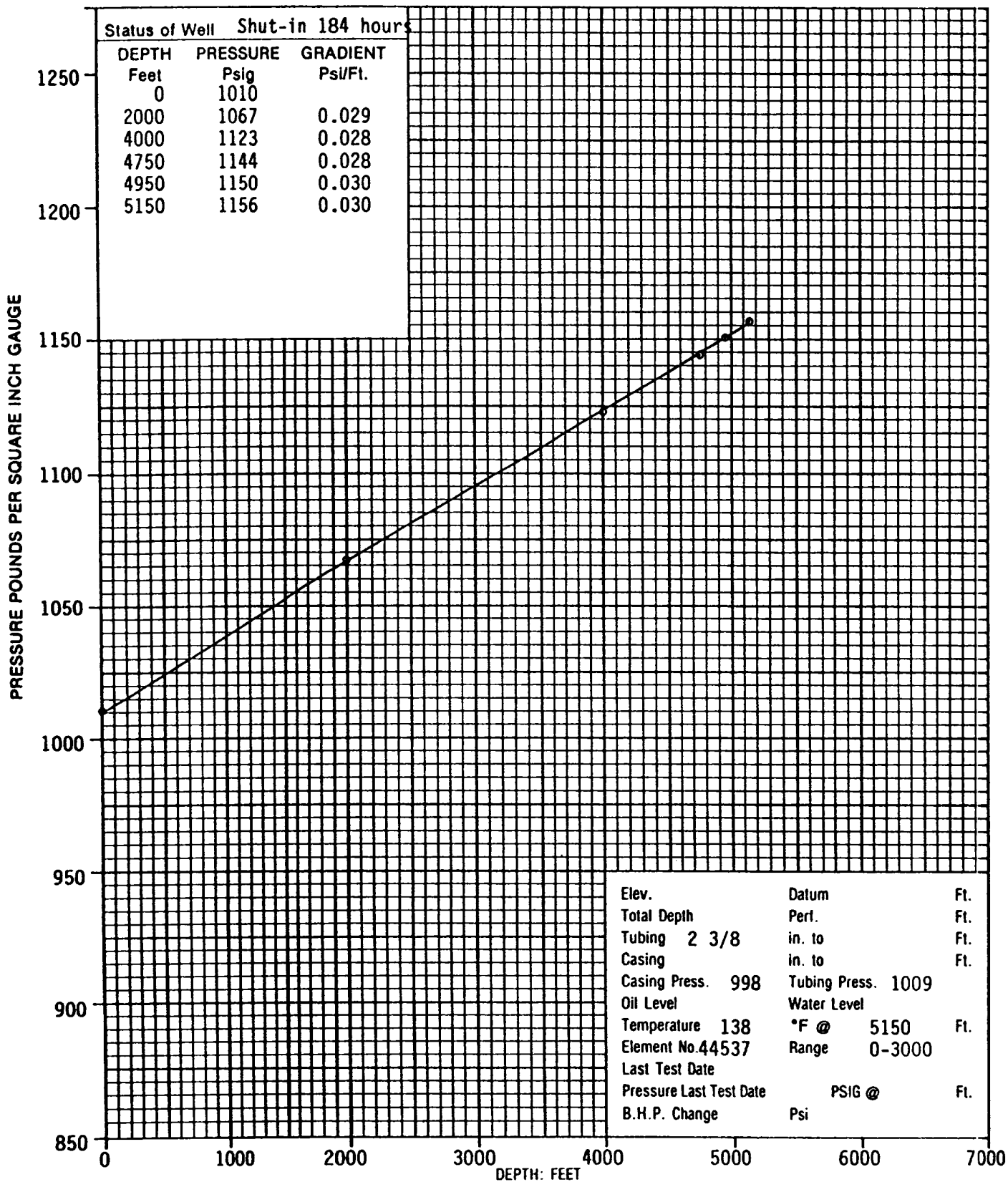
(505) 326-7600
Telephone No.

RINCON UNIT NO. 1-E
1615' FNL, 1830' FEL, SEC 30, T27N-R6W
RIO ARriba COUNTY, NM

KB Datum 10' Above GL



Company UNOCAL CORPORATION Lease RINCON UNIT Well No. 1-E
 Field RINCON County RIO ARRIBA State NEW MEXICO
 Formation MESA VERDE Test Date OCTOBER 3, 1992



TEFTELLER, INC.

RESERVOIR ENGINEERING DATA AND PRODUCTIVITY ENHANCEMENT SERVICES
MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1992 DATE	STATUS OF WELL	TIME	ELAPSED TIME		WELLHEAD PRESSURE		BHP @ 7581' PSIG
			HRS	MIN	TBG	CSG	
9-18	Arrived on location, well flowing 3/4" choke	11:00			270	878	
	Release tandem instruments @ 7581'	12:30					527
		13:30					521
		14:30					523
	Shut-in	14:30	0	00			
	Set 1.78 FWG blanking plug	15:00	0	30			670
	Open sliding sleeve	15:30	1	00			844
	Open Mesa Verde to test	16:00	1	30			962
	Dakota shut-in						
	Mesa Verde flowing	16:15	1	45			1009
		16:30	2	00			1044
		16:45	2	15			1065
		17:00	2	30			1071
		17:15	2	45			1078
		17:30	3	00			1082
		17:45	3	15			1086
		18:00	3	30			1096
		18:15	3	45			1106
		18:30	4	00			1123
		19:00	4	30			1152
		19:30	5	00			1177
		20:30	6	00			1220
		21:30	7	00			1251
		22:30	8	00			1280
		23:30	9	00			1303
9-19		00:30	10	00			1324
		01:30	11	00			1342

TEFTELLER, INC.

RESERVOIR ENGINEERING DATA AND PRODUCTIVITY ENHANCEMENT SERVICES
MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1992 DATE	STATUS OF WELL	TIME	ELAPSED TIME		WELLHEAD PRESSURE		BHP @ 7581' PSIG	
			HRS	MIN	TBG	CSG		
9-19		02:30	12	00			1360	
		03:30	13	00			1375	
		04:30	14	00			1390	
		05:30	15	00			1402	
		06:30	16	00			1413	
		07:30	17	00			1424	
		08:30	18	00			1433	
		09:30	19	00			1442	
		10:30	20	00			1452	
		11:30	21	00			1461	
		12:30	22	00			1470	
		13:30	23	00			1479	
		14:30	24	00			1487	
		16:30	26	00			1502	
		18:30	28	00			1514	
		20:30	30	00			1528	
		22:30	32	00			1539	
	9-20		00:30	34	00			1549
			02:30	36	00			1557
			04:30	38	00			1566
		06:30	40	00			1574	
		10:30	44	00			1593	
		14:30	48	00			1607	
		18:30	52	00			1619	
		22:30	56	00			1632	
9-21		02:30	60	00			1642	
		06:30	64	00			1650	
		10:30	68	00			1659	

TEFTELLER, INC.

RESERVOIR ENGINEERING DATA AND PRODUCTIVITY ENHANCEMENT SERVICES
MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1992 DATE	STATUS OF WELL	TIME	ELAPSED TIME		WELLHEAD PRESSURE		BHP @ 7581' PSIG
			HRS	MIN	TBG	CSG	
9-21		14:30	72	00			1667
		18:30	76	00			1675
		22:30	80	00			1684
9-22		02:30	84	00			1691
		06:30	88	00			1698
		10:30	92	00			1703
		14:30	96	00			1708
		16:30	100	00			1712
9-23		02:30	110	00			1723
		14:30	120	00			1733
9-24		00:30	130	00			1742
		10:30	140	00			1752
		20:30	150	00			1759
9-25		06:30	160	00			1766
		14:30	168	00			1773
	<i>Dakota shut-in, shut-in Mesa Verde</i>	16:00	169	30			1776
		16:30	170	00			1777
		21:30	175	00			1797
9-26		02:30	180	00			1812
		12:30	190	00			1834
		22:30	200	00			1855
9-27		08:30	210	00			1869
		18:30	220	00			1882
9-28		04:30	230	00			1893
		14:30	240	00			1905
9-29		00:30	250	00			1915
		10:30	260	00			1925
		20:30	270	00			1936

RINCON UNIT NO. 1 E

After a 7 day SI period:

$$\text{Mesaverde BHP} = 1156 \text{ psi @ } 5150'$$

$$\text{Dakota BHP} = 1812 \text{ psi @ } 7581'$$

$$\text{Gas Gradient} = \frac{(0.01875)(0.65)(2500)}{(0.88)(655)} = 0.05 \text{ psi/ft}$$

Adjusting to a common datum of 5150':

$$\text{Mesaverde BHP} = 1156 \text{ psi}$$

$$\text{Dakota BHP} = 1812 - [(0.05)(7581 - 5150)] = 1690 \text{ psi}$$

Therefore the reservoir pressures fall within the 50% requirement.



WELL ANALYSIS COMPARISON

LEASE: RINCON #1E

SEPTEMBER 30, 1992

DATE:	9/18/92	9/25/92
NO.:	20022	20023
	DAKOTA MESAVERDE	
	MOLE %	MOLE %
	-----	-----
NITROGEN	0.206	0.413
CO2	1.186	1.104
METHANE	90.732	87.977
ETHANE	5.709	6.411
PROPANE	1.283	2.466
I-BUTANE	0.209	0.439
N-BUTANE	0.323	0.602
I-PENTANE	0.124	0.210
N-PENTANE	0.093	0.156
HEXANE+	0.135	0.222
BTU'S	1087.8	1129.7
-----	-----	-----
GPM	2.1889	2.9582
-----	-----	-----
SPEC GRAV	0.6231	0.6509
-----	-----	-----

RINCON UNIT NO. 1 E
ALLOCATION FORMULA
(BASED ON C-116)

<u>GAS PRODUCTION:</u>	Mesaverde Rate	457 MCFD
	Dakota Rate	<u>748</u> MCFD
	Total Rate	<u>1205</u> MCFD

Therefore,	Mesaverde	38%
	Dakota	62%

<u>OIL PRODUCTION:</u>	Mesaverde Rate	0 BOPD
	Dakota Rate	<u>0</u> BOPD
	Total Rate	<u>0</u> BOPD

Therefore,	Mesaverde	50%
	Dakota	50%

Unocal Corporation
3300 North Butler Avenue
Suite 200
Farmington, New Mexico 87401
Telephone (505) 326-7600
Fax: (505) 326-6145



October 29, 1992

Farmington District

United States Department of the Interior
Bureau of Land Management
1235 La Plata Highway
Farmington, New Mexico 87401

Dear Sirs:

Union Oil Company of California (UNOCAL) has requested permission from the New Mexico Oil Conservation Division to downhole commingle production from the Blanco Mesaverde and Basin Dakota formations in the following well:

Rincon Unit No. 1 E
1615' FNL, 1830' FEL
Section 30, T27N, R6W
Rio Arriba County, New Mexico

If you have any objections to this proposal, please notify the NMOCD within twenty (20) days. If you have any questions about this application, please contact Dana Delventhal at (505)326-7600.

Sincerely,

Union Oil Company of California
dba UNOCAL

A handwritten signature in dark ink, appearing to read "W. Irwin".

William L. Irwin
District Petroleum Engineer

WLI/DLD/df