STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-104
Revised 10-1-78

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U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: Meridian Oil Inc.

Address: 21 Desta Drive Midland, Texas 79705

Reason(s) for filing (Check proper box)

New Well ☐
Recompletion ☐
Change in ~~Ownership~~ Operator XX

Change in Transporter of:
Oil ☐ Dry Gas ☐
Casinghead Gas ☐ Condensate ☐

Other (Please explain)
Meridian Oil Inc. is Operator for El Paso Production Company

If change of ownership give name and address of previous owner: El Paso Natural Gas Co., 1800 Wilco Building, Midland, Tx 79701

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Shell State	4	Jalmat Tansil (Yates-7Rivers)	State, Federal or Fee State	B-1167

Location
Unit Letter K : 1980 Feet From The South Line and 1980 Feet From The West

Line of Section 2 Township 23S Range 36E NMPM, Lea County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☐	Address (Give address to which approved copy of this form is to be sent)
Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas XX	Address (Give address to which approved copy of this form is to be sent)
El Paso Natural Gas Co.	P. O. Box 1492, El Paso, Texas 79978

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	K	2	23S	36E	Yes	Unknown

IV. CERTIFICATE OF COMPLIANCE

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

Cathy Mohes
(Signature)

Engineering Tech III
(Title)

11/5/86
(Date)

OIL CONSERVATION DIVISION

APPROVED NOV 1 4 1986, 19__

BY ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

TITLE _____

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of operator, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE OCC

RECEIVED 11 AM 10 02

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea

Initial ____ Annual ____ Special X Date of Test 11-12 to 11-16-56

Company El Paso Natural Gas Company Lease Shell State Well No. 4

Unit K Sec. 2 Twp. 23 S Rge. 36 E Purchaser El Paso Natural Gas Company

Casing 5½ Wt. 15.5 I.D. 4.976 Set at 2950 Perf. ____ To ____

Tubing 2 Wt. 4.7 I.D. 1.995 Set at 3470 Perf. ____ To ____

Gas Pay: From 2950 To 3490 L 2950 xG .655 -GL 1932 Bar.Press. 13.2

Producing Thru: Casing ____ Tubing X Type Well Single

Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 6-9-54 Packer None Reservoir Temp. ____

OBSERVED DATA

Tested Through ~~(Prover)~~ ~~(Choke)~~ (Meter) Type Taps Flange

No.	Flow Data (Prover) (Line) Size	Flow Data (Choke) (Orifice) Size	Flow Data Press. psig	Flow Data Diff. h_w	Flow Data Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						917		917		72
1.	4	1.500	581	21.16	68	864		878		24
2.	4	1.500	580	36.00	66	836		862		24
3.	4	1.500	578	48.30	62	814		851		24
4.	4	1.500	618	75.69	66	763		829		24
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	13.99	112.11		.9924	.9571	1.058	1,575
2.	13.99	146.23		.9943	.9571	1.058	2,059
3.	13.99	168.95		.9981	.9571	1.062	2,399
4.	13.99	218.54		.9943	.9571	1.062	3,090
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio ____ cf/bbl.

Gravity of Liquid Hydrocarbons ____ deg.

F_c ____ $(1-e^{-s})$ ____

Specific Gravity Separator Gas ____

Specific Gravity Flowing Fluid ____

P_c 930.2 P_c^2 865.3

No.	P_w (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$
1.	891.2	769.5				794.2	71.1		.9575
2.	875.2	721.1				766.0	99.3		.9431
3.	864.2	684.3				746.8	118.5		.9280
4.	842.2	602.5				709.3	156.0		.9070
5.									

Absolute Potential: 15,000 MCFPD; n .920

COMPANY El Paso Natural Gas Company

ADDRESS P. O. Box 1384; Jal, New Mexico

AGENT and TITLE R. T. Wright R. T. Wright - Petroleum Engineer

WITNESSED Jack T. Littlefield

COMPANY El Paso Natural Gas Company

REMARKS

Not enough draw down because of choke restriction.

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w). MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia

P_w = Static wellhead working pressure as determined at the end of flow period. (Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressability factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t.