

CASE 3115: Application of MONSANTO
COMPANY for a dual completion of
its LOWE-STATE WELL NO. 1.

CASE No.
3115

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

R-23-E

R-24-E

Ralph Lowe

Ralph Lowe

Kerr McKee

Federal 26

Federal

25 30 Federal

35
John H. Trigg

Monsanto 68.75 %
Ralph Lowe 31.25 %

36 31
Redfern Dev.



MONSANTO CO.
LOWE STATE

T
21
S

Federal

State

Federal

T
22
S

Continental 2

State

Atlantic Ref. Co.

Federal

1 6

John H.
Trigg
Federal


Phillips Pet.

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 3115

INDIAN BASIN AREA
Eddy County, New Mexico

SCALE: 1" = 1000'

Form No: 7XL5

 - Monsanto Acreage

JOINT WELL WITH RALPH LOWE

Monsanto (Oper) 68.75 %

Lowe 31.25 %

640 Acre Spacing Unit - Sec. 36 - 21S - 23E

Region 03 District MIDLAND

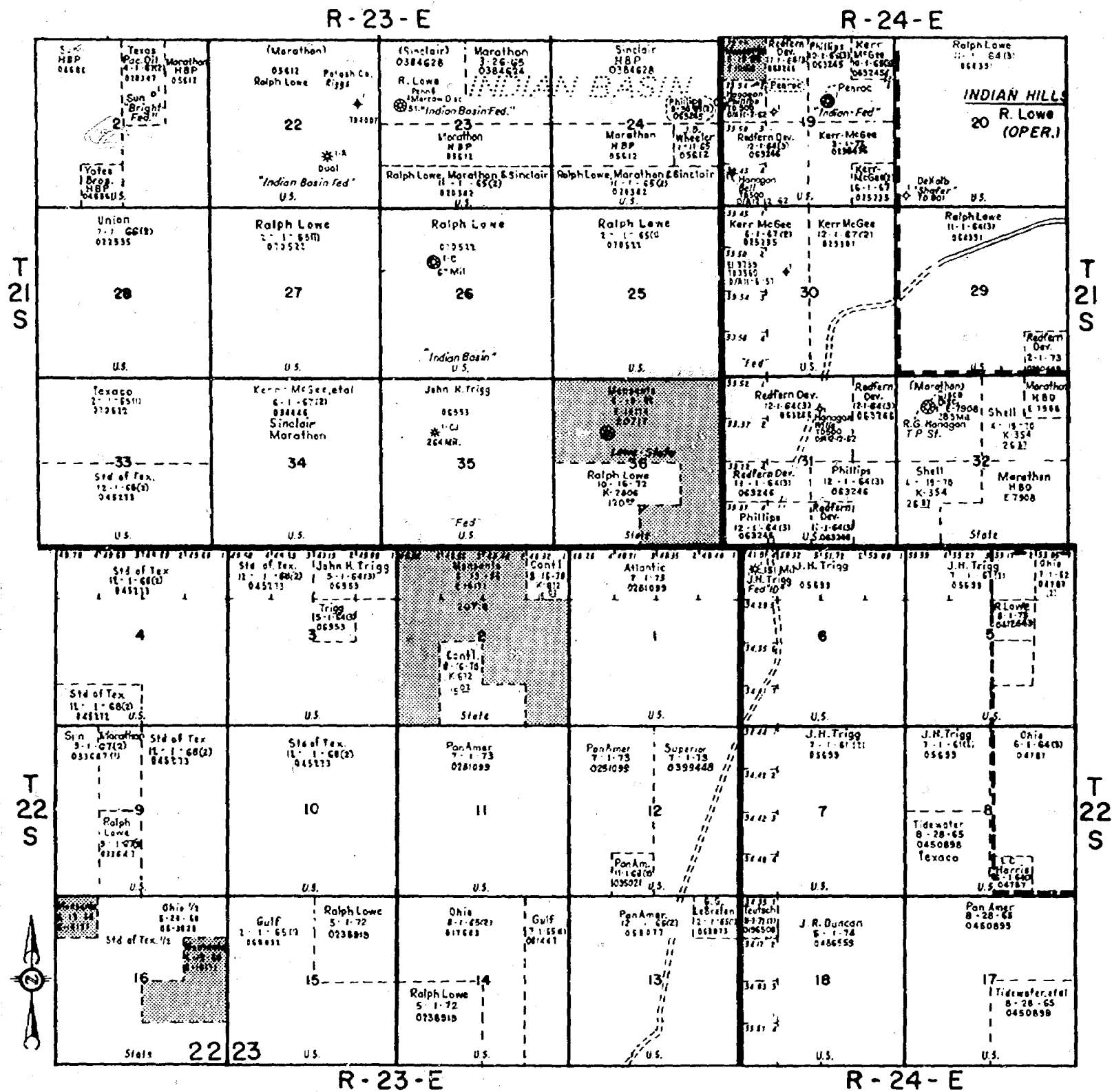
State NEW MEXICO

County EDDY

Field INDIAN BASIN

Date 9-21-64

Scale 1" = 4000'



NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

5-1-61

APPLICATION FOR MULTIPLE COMPLETION

Operator MONSANTO COMPANY		County Eddy		Date September 18, 1964
Address Drawer 1829, Midland, Texas		Lease Lowe-State		Well No. 1
Location of Well	Unit	Section 36	Township 21S	Range 23E

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

3. The following facts are submitted:	Upper Zone Indian Basin	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Upper Penn		Morrow
b. Top and Bottom of Pay Section (Perforations)	7520-45		9296-9555
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

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

- Yes a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- Yes c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
- Yes d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

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

Ralph Lowe, P. O. Box 832, Midland, Texas

Kerr-McGee, Kerr-McGee Building, Oklahoma City, Oklahoma

John H. Trigg, 1011 E. 3rd, Roswell, New Mexico

Continental Oil Company, P. O. Box 1377, Roswell, New Mexico

Atlantic Refining Company, Box 1978, Roswell, New Mexico

Phillips Petroleum Company, P. O. Box 2105, Hobbs, New Mexico

Redfern Development Corporation, Box 1747, Midland, Texas

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO ____ If answer is yes, give date of such notification 9-18-64

CERTIFICATE: I, the undersigned, state that I am the Reg. Prod. Supt. of the MONSANTO COMPANY (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

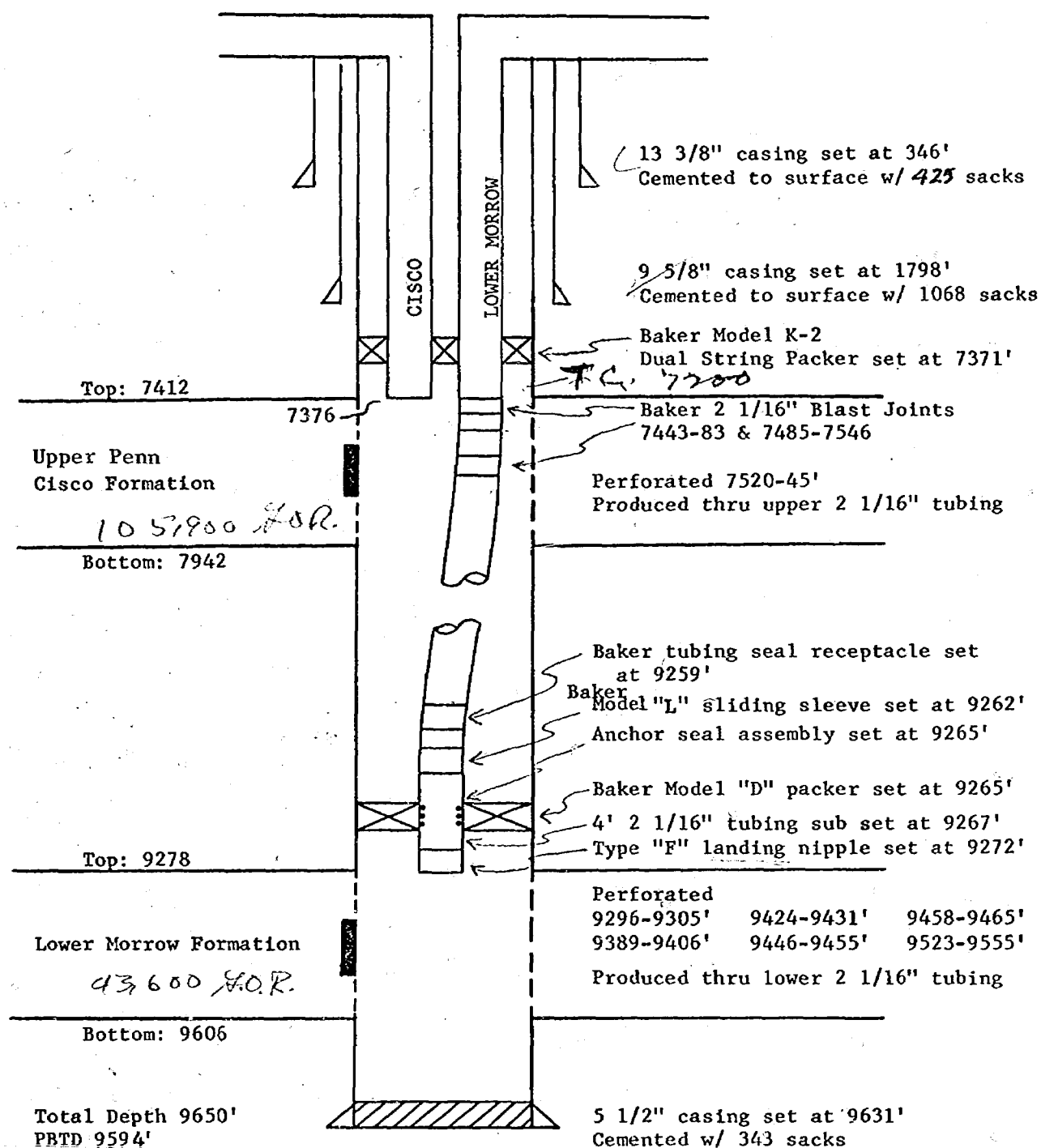
Signature

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

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

BEFORE EXAMINER UT7	
OIL CONSERVATION COMMISSION	
<u>A</u>	EXHIBIT NO. <u>2</u>
CASE NO. <u>3115</u>	

XERO COPY



DIAGRAMMATIC SKETCH SHOWING DUAL COMPLETION INSTALLATION
OF MONSANTO COMPANY'S LOWE STATE #1, EDDY COUNTY, NEW MEXICO

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 4
CASE NO. 3115

NEW MEXICO OIL CONSERVATION COMMISSION

SOUTHEAST NEW MEXICO PACKER LEAKAGE TEST

Operator Monsanto Company			Lease Lower State			Well No. 1	
Location of Well	Unit F	Sec 36	Twp 21S	Rge 23E	County Eddy		
Name of Reservoir or Pool		Type of Prod (Oil or Gas)	Method of Prod Flow, Art Lift	Prod. Medium (Tbg or Csg)	Choke Size		
Upper Compl	Upper Penn	Gas	Flow	Upper Tubing	19/64		
Lower Compl	Morrow	Gas	Flow	Lower Tubing	13/64		

FLOW TEST NO. 1

Both zones shut-in at (hour, date): 8:00 AM 9-24-64

Well opened at (hour, date): 9:00 AM 9-23-64

	Upper Completion	Lower Completion
Indicate by (X) the zone producing.....	<u>X</u>	
Pressure at beginning of test.....	<u>2349</u>	<u>2975</u>
Stabilized? (Yes or No).....	<u>Yes</u>	<u>Yes</u>
Maximum pressure during test.....	<u>2349</u>	<u>2987</u>
Minimum pressure during test.....	<u>1840</u>	<u>2975</u>
Pressure at conclusion of test.....	<u>1840</u>	<u>2987</u>
Pressure change during test (Maximum minus Minimum).....	<u>509</u>	<u>12</u>
Was pressure change an increase or a decrease?.....	<u>Decrease</u>	<u>Increase</u>

Well closed at (hour, date): 3:00 PM 9-23-64

Oil Production During Test: 3.28 bbls; Grav. 58.9

Gas Production During Test: 347.2 MCF; GOR 105,900

Total Time On Production 4 Hours

Remarks _____

FLOW TEST NO. 2

Well opened at (hour, date): 8:30 AM 9-29-64

	Upper Completion	Lower Completion
Indicate by (X) the zone producing.....		<u>X</u>
Pressure at beginning of test.....	<u>2349</u>	<u>2977</u>
Stabilized? (Yes or No).....	<u>Yes</u>	<u>No</u>
Maximum pressure during test.....	<u>2349</u>	<u>2977</u>
Minimum pressure during test.....	<u>2349</u>	<u>740</u>
Pressure at conclusion of test.....	<u>2349</u>	<u>740</u>
Pressure change during test (Maximum minus Minimum).....	<u>0</u>	<u>2237</u>
Was pressure change an increase or a decrease?.....	<u>No Change</u>	<u>Decrease</u>

Well closed at (hour, date): 1:30 PM 9-29-64

Oil Production During Test: 4.3 bbls; Grav. 57.1

Gas Production During Test: 187.4 MCF; GOR 43,600

Total time on Production 5 Hours

Remarks *A Potential Back Pressure Test was taken as the flow test of each zone to conserve gas. The choke size shown is for the last rate.

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

Approved _____ 19 _____
New Mexico Oil Conservation Commission

Operator Monsanto Company
By West Texas Engineering Service, Inc.

By _____
Title _____

Title Field Petroleum Engineer
Date 10-2-64

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Indian Basin Formation Upper Penn County Eddy
 Initial X Annual _____ Special _____ Date of Test 9-28-64
 Company Monsanto Company Lease Low-State Well No. 1-UT
 Unit F Sec. 36 Twp. 21S Rge. 23E Purchaser None
 Casing 5 1/2 Wt. 17.0 I.D. 4.892 Set at 9631 Perf. 7520 To 7545
 Tubing 2 1/16 Wt. 3.25 I.D. 1.750 Set at 7376 Perf. Open To Ended
 Gas Pay: From 7412 To 7942 L 7376 xG .7013 -GL 5.173 Bar.Press. 13.2
 Producing Thru: Casing _____ Tubing X Type Well G. G. Dual
 Single-Bradenhead-G. G. or G.O. Dual
 Date of Completion: 9-22-64 Packer 7371 & 9265 Reservoir Temp. _____

OBSERVED DATA

Tested Through (Packer) (Orifice) (Meter) Type Taps Flange

No.	Flow Data			Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	
SI						2349	70	Packer
1.	3"	1.50	455	16.5	79	2242	70	Packer
2.	3"	1.50	495	27.5	75	2197	70	Packer
3.	3"	1.50	550	48.5	66	2062	72	Packer
4.	3"	1.50	615	79.5	62	1840	74	Packer
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.	14.36	87.894	468.2	.9822	.9415	1.046	1.221
2.	14.36	118.218	508.2	.9859	.9415	1.050	1.655
3.	14.36	165.273	563.2	.9943	.9415	1.062	2.359
4.	14.36	223.477	628.2	.9981	.9415	1.072	3.233
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 105.900 cf/bbl.
 Gravity of Liquid Hydrocarbons 58.9 deg.
 F_c 13.991 (1-e^{-s}) .299

Specific Gravity Separator Gas .6769
 Specific Gravity Flowing Fluid .7013
 P_c 2362.2 P_c 5.580.0

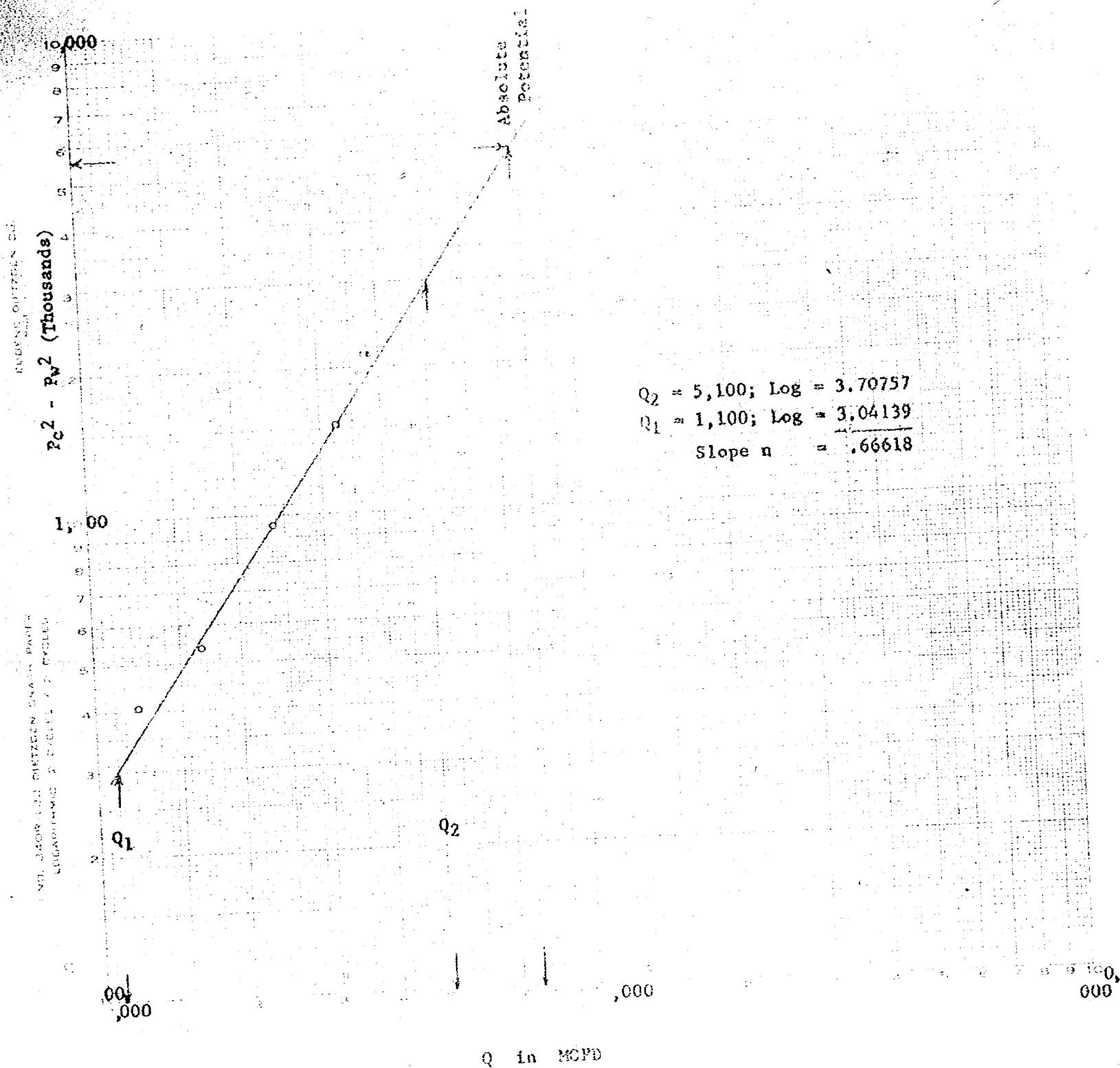
No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	2255.2	5,085.9	17.083	291.8	87.2	5,173.1	406.9	2,274.4	96.3
2.	2210.2	4,885.0	23.155	536.2	160.2	5,045.3	534.7	2,246.2	95.1
3.	2075.2	4,306.5	33.005	1,089.3	325.7	4,632.2	947.8	2,152.2	91.1
4.	1853.2	3,434.4	45.233	2,046.0	611.8	4,046.2	1,533.8	2,011.5	85.2
5.									

Absolute Potential: 7.700 MCFPD; n .666

COMPANY Monsanto Company
 ADDRESS Box 1829 - Midland, Texas
 AGENT and TITLE R. W. Harrington - Field Petroleum Engineer
 WITNESSED
 COMPANY West Texas Engineering Service, Inc.

REMARKS

COMPANY: Monsanto Company
 WELL: Love State No. 1-UT
 LOCATION: F 36-215-23E
 COUNTY: Eddy
 DATE: 9-28-64



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PAGE 1

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 13, 1964

EXAMINER

HEARING

IN THE MATTER OF: Application of Monsanto Com-
pany for a dual completion, Bady County,
New Mexico.

Case No. 3115

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: We will now call Case Number 3115.

Do you have the same witnesses?

MR. HUNKER: I have the same witness, Mr. Utz, and he has been sworn and he will continue to testify under oath. I would also like to have Applicant's Exhibit's One through Seven marked for identification.

(Whereupon, Applicant's Exhibit's One through Seven marked for identification.)

MR. UTZ: Let the record show he has been previously sworn.

MR. HUNKER: Are you satisfied with the professional and educational qualifications of this witness?

MR. UTZ: Yes, he has been qualified.

R. A. G A S K I L L, called as a witness herein, and having been previously duly sworn on oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HUNKER:

Q Are you familiar with the well known as the Lowe-State Well which is involved in Monsanto's Application, Mr. Gaskill?

A Yes, sir, I am.

Q Will you refer to Exhibit Number One and tell the Examiner what this Exhibit shows?

A This is a large scale plat showing the location of our Monsanto Lowe-State Number One as being in the southeast of the northwest quarter of Section 36, Township 29 South, Range



23 East; and there is a small scale plat showing this Well in relationship to the other wells in the area.

Q Is your Company seeking a dual completion of this Well?

A Yes, sir, we are.

Q What type of dual completion?

A A parallel dual completion.

Q Has there been a Field Rule established by the New Mexico Oil Conservation Commission for the two formations in which this Well is being completed?

A Yes, sir, there is a temporary 640 acre spacing in this area.

MR. UTZ: Is this a copy of the Exhibit in this Case?

MR. HUNKER: No, they are right here, (indicating).

Q (By Mr. Hunker) Did this Lowe-State Well encounter the same two formations that were encountered in the other wells that have been dual completed in this area?

A Yes, sir, it is the Upper-Pennsylvanian or Cisco formation and the lower Morrow formation.

Q Referring to Exhibit Two, is this the form of Application for dual completion that you have filed in this particular Case indicating the reservoirs and the tops and bottoms of the two formations?

A Yes, sir, it is. It shows the Upper-Pennsylvanian



or Cisco from 7520 to 45. These are perforations. And the Morrow from 9296 to 9555.

Q Turn to Exhibit Number Three, if you will, Mr. Gaskill, which is a series of logs taken with regard to this well and explain what these logs indicate and tell the Examiner what is marked on the logs.

A These logs, they are marked on these logs the tops of the formations, drill stem tests and perforating data.

Q Do they show the formation tops of both the Strawn and the Morrow?

A Yes, sir.

Q Turn to Exhibit Number Four, which is your schematic diagram of the actual dual completion, and explain to the Examiner what this indicates.

A This is a schematic of the arrangement of equipment down hole in the Lowe-State Well. The lower Morrow perforations from 9296 to 9555 in the Upper-Pennsylvanian or Cisco, from 7520 to 45, a Model "D" packer is set at 9265, and it was equipped -- it is equipped with a type "F" landing nipple which projects below the Model "D" packer. A Model "L" sliding sleeve is in the assembly at 9265 above the Model "D" packer, and a tubing seal receptacle at 9259. We have a packer Model "K", two-dual string packer set at 7271. Along the tubing string we have blast joints from 7443 to 83 and 7485 to 7546.

deanley-majer

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Q And no communication between the two gas zones. is that correct?

A No communication.

Q Does this also indicate the gas-oil ratio?

A Yes, sir, it does for the --

Q -- Cisco?

A Yes, for the Cisco. One hundred and five thousand and nine hundred GOR; and for the -- no. Yes, for the Morrow, forth three thousand and six hundred GOR.

Q Is there anything else that you would care to point out in connection with this Exhibit with regard to pressures or temperatures that were encountered at the time the tests were being taken?

A No, there are not.

Q Turn to Exhibit Number's Six and Seven. Are these reports of your multi-point back pressure tests on the two formations?

A Yes, sir.

Q Explain the test data with respect to these two Exhibits.

A The Upper-Penn multi-point back pressure test is the -- indicates an absolute potential of seven thousand seven hundred MCF per day; and the four point back pressure test on the Morrow indicates an open flow potential. absolute potential

of 840 MCF per day.

Q Explain to the Examiner approximately what would be saved by this dual completion rather than to have two separate wells?

A This again is approximately \$150,000.00.

Q Is there any reason in your opinion, Mr. Gaskill, why these two gas reservoirs cannot be efficiently and economically drained under a dual completion with a separate well for each formation?

A These producing intervals should be efficiently drained as a dual.

MR. HUNKER: We would like to offer Exhibits One through Seven into evidence.

Q (By Mr. Hunker) First of all, were these Exhibits One through Seven prepared by you or under your supervision, or for your company by companies employed by your company?

A They were.

MR. HUNKER: We would like to offer Exhibit Numbers One through Seven into evidence.

MR. HAZ: Without objection Exhibits One through Seven will be entered into the record of this case.

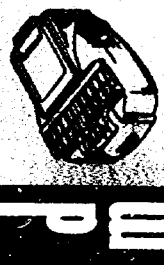
(Examiner: Applicant's Exhibits One through Seven admitted into evidence.)

MR. HUNKER: I have no further questions.

dearnley-meier

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HEARINGS, STATE OF NEW MEXICO

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STATION
COMM

Charles H. H. Walker
LIBRARY PUBLIC

by confidential sources
March 25, 1968

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 3115
heard by me on Oct 13 1964
Thurston, Examiner
New Mexico Oil Conservation Commission

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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I N D E X

<u>WITNESS</u>	<u>PAGE</u>
R. A. GASKILL	
Direct Examination by Mr. Hunker	2
Cross Examination by Mr. Utz	8

E X H I B I T S

<u>NUMBER</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED</u>	<u>ADMITTED</u>
Applicant's Exhibit's One through Four	2	7	7

DRAFT

JMD/esr

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 3115

Order No. R- 2786

APPLICATION OF MONSANTO COMANY
FOR A DUAL COMPLETION, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
October 13, 1964, at Santa Fe, New Mexico, before Examiner

✓ Daniel S. Nutter *Elvis A. Htz.*

NOW, on this _____ day of October, 1964, the Commission,
a quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

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

(2) That the applicant, Monsanto Company,
seeks authority to complete its Lowe-State
Well No. 1, located in Unit F of Section 36, Township

21 South, Range 23 East, NMPM, Eddy County, New
~~XXXX~~ ~~XXXX~~

Mexico, as a dual completion (conventional) ~~(conventional)~~ ~~XXXX~~
to produce gas ~~(conventional)~~ ~~XXXX~~

Indian Basin - Upper Pennsylvanian Gas Pool and an
from the Cisco Canyon and pool through
undesigned ~~lower Morrow~~ *gas pool* ~~XXXX~~

through parallel strings of 2 1/16 -inch
tubing, with separation of zones by a packer set at approximately
9265 feet.

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

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Monsanto Company,
is hereby authorized to complete its Lowe-State
Well No. 1, located in Unit F of Section 36, Township
21 ~~XXXX~~ South, Range 23 ~~XXXX~~ East, NMPM, Eddy County, New
Mexico, as a dual completion ~~(conventional)~~ ~~XXXX~~ to produce gas
~~(combination)~~ ~~XXXX~~
~~(unconventional)~~ ~~XXXX~~
Indian Basin - Upper Pennsylvanian gas pool and an
from the Cisco Canyon and ~~Pool XXXX through~~
undesignated gas pool
Lower Morrow formations through parallel strings of 2 1/16 -inch
tubing, with separation of zones by a packer set at approximately
9265 feet;

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

PROVIDED FURTHER, that the applicant shall take packer-leakage
~~zone segregation~~
tests upon completion and annually thereafter during the Annual
Shut-in Pressure
~~Gas-Oil Ratio~~ Test Period for the Lower Morrow formation. ~~XXXX~~
Deliverability

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

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

DOCKET: EXAMINER HEARING - TUESDAY - OCTOBER 13, 1964

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

The following cases will be heard before Daniel S. Nutter, Examiner,
or Elvis A. Utz, Alternate Examiner:

CASE 3108: (Continued from the September 30, 1964 examiner hearing)

Application of Monsanto Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Dagger Draw Well No. 1, located in Unit O of Section 6, Township 20 South, Range 25 East, Eddy County, New Mexico, to produce gas from the Strawn and Morrow formations through the casing-tubing annulus and through tubing, respectively.

CASE 3115: Application of Monsanto Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Lowe-State Well No. 1 located in Unit F of Section 36, Township 21 South, Range 23 East, Eddy County, New Mexico, to produce gas from the Cisco Canyon and Lower Morrow formations through parallel strings of tubing.

CASE 3116: Application of Tex-Star Oil & Gas Corporation for force-pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Pearl-Queen Pool underlying the NW/4 NW/4 of Section 24, Township 19 South, Range 35 East, Lea County, New Mexico.

CASE 3117: Application of Tex-Star Oil & Gas Corporation for force-pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Basin-Dakota Pool underlying the E/2 of Section 26, Township 30 North, Range 14 West, San Juan County, New Mexico.

CASE 3118: Application of Gulf Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the South Penrose Skelly Unit Area comprising 4,400 acres, more or less, of Federal, State and Fee lands in Township 22 South, Range 37 East, Penrose Skelly Pool, Lea County, New Mexico.

October 13, 1964 Examiner Hearing

CASE 3119: Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Penrose Skelly Pool in its South Penrose Skelly Unit Area by the injection of water into the Grayburg formation through six wells in Sections 5 and 6, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 3120: Application of Dr. Sam G. Dunn for a Review of the Commission's Directive of August 27, 1964, concerning salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks a review of the Commission's Directive of August 27, 1964, prohibiting the disposal of produced salt water in unlined pits after November 1, 1964, in the Linda-San Andres Pool and adjacent areas in Townships 6 and 7 South, Range 26 East, Chaves County, New Mexico. Applicant specifically requests an extension of the November 1st deadline and a determination that salt water disposal in unlined pits in Sections 26, 27, and 34, Township 7 South, Range 26 East, among other areas, does not constitute a hazard to fresh waters and should be excepted from the Commission's directive.

CASE 3121: Application of Dr. Sam G. Dunn for a water injection project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a water injection project by the injection of water into the San Andres formation through one well located in Section 33, Township 6 South, Range 26 East, Linda-San Andres Pool, and by the injection of water into one well in Section 32 or 33, and one well in Section 27, Township 7 South, Range 26 East, all in Chaves County, New Mexico.

CASE 3122: Application of Continental Oil Company for an unorthodox location and a non-standard unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its Meyer B-4 Well No. 27 at an unorthodox location 5,610 feet from the South line and 660 feet from the East line of Section 4, Township 21 South, Range 36 East, Oil Center Blinebry Pool, Lea County, New Mexico. Said well would be dedicated to a 53-acre non-standard unit comprising that portion of Lots 1 and 8 of said Section 4 which is productive from the Oil Center Blinebry Pool.

CASE 3123: Application of Continental Oil Company for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of special pool rules including a provision for 80-acre spacing and a gas-oil ratio of 6000 to 1 for the Monument-Tubb Pool in Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 3124: Application of Continental Oil Company to amend Order No. R-2566, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an amendment to Order No. R-2566, which authorized the Continental Baish-Yates Waterflood Project, to also provide authority for the injection into each well of approximately 500 barrels of LPG.

CASE 3125: Application of Shell Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Antelope Ridge Unit Well No. 4-1 in Unit B of Section 4, Township 24 South, Range 34 East, Lea County, New Mexico, to produce gas from the Antelope Ridge Pennsylvanian and Antelope Ridge Devonian Gas Pools through parallel strings of tubing.

CASE 3126: Application of Murphy Oil Corporation for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project in the Many Rocks-Gallup Pool by the injection of water into the Gallup formation through five wells in Sections 17, 18 and 20, Township 32 North, Range 17 West, San Juan County, New Mexico. Applicant further seeks the promulgation of special rules for the operation of said project.

CASE 2654: (Reopened)
In the matter of Case No. 2654 being reopened pursuant to the provisions of Order No. R-2349, which order established temporary 320-acre gas proration units for the Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, for a period of two years. The Commission will consider indefinite extension of Order No. R-2349 in the absence of evidence to the contrary.

CASE 3127: Application of Shell Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the China Canyon Unit Area comprising 7611 acres, more or less, of Federal, State and Fee lands in Township 23 South, Ranges 23 and 24 East, Eddy County, New Mexico.

CASE 3128: Application of Shell Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Grama Ridge Unit Area comprising 3052 acres, more or less, of Federal and State lands in Townships 21 and 22 South, Range 34 East, Lea County, New Mexico.

PAGE -4-
October 13, 1964 Examiner Hearing

CASE 3129: Application of Shell Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West Wilson Deep Unit Area comprising 3360 acres, more or less, of State and Fee lands in Township 21 South, Range 34 East, Lea County, New Mexico.

ir/



This Week...

Vol 37 No 303
10-16-64
Friday

PRODUCTION PURCHASE

Continental Oil has reported purchase of properties involving production of about 1475 bbls of oil per day in three states. Purchase was made from Wiley Harris, Jr, Houston independent. Production is located in Texas, Kansas and Montana. The Montana property involved consists of 16.6 net wells producing 175 bbls of oil per day in Southwest Cutbank field.

LIAISON POLICY TO IPAA

After a meeting in Oklahoma City, the Liaison Committee of Cooperating Oil & Gas Associations has agreed to submit its policies to the Independent Petroleum Association of America for consideration by the organization. The liaison group says, however, that it intends to press for a tariff on imported oil regardless of the position taken by IPAA on this policy. The liaison group, composed largely of independents, as is IPAA, has been to some extent at odds with IPAA on the question of tariffs on imports.

CRUDE RUNS DOWN

Runs of crude oil to refinery stills in the U. S. were sharply reduced during the week ended October 9. Hurricane Hilda, which caused suspension of operations for about 343,000 bbls per day of Gulf Coast capacity, was largely responsible for the drop. Runs for the nation averaged 8,749,000 bbls per day. Total decline from the previous week was 404,000 bbls per day, but the preceding week had established a record high for refinery operations.

GAS RESERVES

Future natural gas supply of the U. S. which will be available under existing circumstances but excluding proved reserves, has been estimated at 629.5 trillion cu ft. Estimate was made by the Future Natural Gas Supply Committee, headed by Larry Shomaker, Northern Natural Gas, Omaha. The report, first issued by the newly formed committee, noted that when reserves classified as proven by the American Gas Association's Committee on Reserves are included, the country's total gas supply approximates 905 trillion cu ft.

SALE DROPPED

Spokesmen for Reserve Oil & Gas and Texas Gas Producing have announced that the plan of reorganization adopted earlier by the two firms has been terminated. The plan had called for Reserve Oil to acquire substantially all the assets of Texas Gas.

[This Week...]

ENERGY SOURCES

The consumption of natural gas in the U. S. has increased by more than two and a half times since 1946, according to figures compiled by the American Gas Association. In the 18 year period, derivation of energy from natural gas has increased by 258 per cent. For petroleum the gain was 107 per cent, for water power, 32 per cent. Coal, in the meantime, has declined by 23 per cent.

MEETINGS UPCOMING

(Listing events in the Rockies for the next 30 days and major industry meetings scheduled here or elsewhere for several months in the future)

OCTOBER

- 25-27 Independent Petroleum Association of America, annual meeting, Shamrock-Hilton, Houston.
28-29 Mid-Continent Oil & Gas Association, Kansas-Oklahoma division, annual meeting, Oklahoma City.

NOVEMBER

- 4-6 Rocky Mountain Oil & Gas Association, annual meeting, Cosmopolitan Hotel, Denver.
9-11 American Petroleum Institute, annual meeting, Hilton Hotel, Chicago.
13-14 American Institute of Professional Geologists, annual meeting, Denver-Hilton Hotel, Denver.

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Memo

10-15-64

From
A. R. Kendrick
Engineer

To Elvis:

August Schedule - page 115
Skelly Oil
Jicarilla "C" 15 G-34-25-5

July Net allowable shown as 5957

Redistribution Book -- page 95
same well shown with July Net Before Redistribution
as 9103

Please advise

AR

Case 3115.

Recd 10-13-64

Rec. 10-14-64

Grant Monsanto permission to
locally complete their Lowe-St.
#1 F. 30-215-23E. in the Indian
Basin ~~Cerro~~ - upper Perm. & Monow.
Pools.

Thus A. V. G.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 3115
Order No. R-2786

APPLICATION OF MONSANTO COMPANY
FOR A DUAL COMPLETION, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 13, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 21st day of October, 1964, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Monsanto Company, seeks authority to complete its Lowe-State Well No. 1, located in Unit F of Section 36, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from the Indian Basin-Upper Pennsylvanian Gas Pool and an undesignated Morrow gas pool through parallel strings of 2 1/16-inch tubing, with separation of zones by a packer set at approximately 9265 feet.

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

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

-2-

CASE No. 3115
Order No. R-2786

IT IS THEREFORE ORDERED:

(1) That the applicant, Monsanto Company, is hereby authorized to complete its Lowe-State Well No. 1, located in Unit F of Section 36, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) to produce gas from the Indian Basin-Upper Pennsylvanian Gas Pool and an undesignated Morrow gas pool through parallel strings of 2 1/16-inch tubing, with separation of zones by a packer set at approximately 9265 feet;

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

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Shut-in Pressure Test Period for the Morrow formation.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

E. S. Walker
E. S. WALKER, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

esr/

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. B. JOHNNY WALKER
MEMBER

P. O. BOX 2088
SANTA FE

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

October 23, 1964

Mr. George H. Hunker, Jr.
Attorney at Law
Post Office Box 10
Roswell, New Mexico

Re: CASE NO. 3108 and 3115
ORDER NO. R-2785 and R-2786
APPLICANT MONSANTO COMPANY

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC x

Aztec OCC

OTHER

15.

RECEIVED

NOV 2 1964

D. C. C.
ARTEBIA, OFFICE

11-1156
11-115

PACKER SETTING AFFIDAVIT

I, C. K. Reeves, being of lawful age
Name of Party Making Affidavit
and having full knowledge of the facts hereinbelow set out do state:

That I am employed by MONSANTO COMPANY in the
capacity of Foreman, that on 9-8, 1964,
Date
I personally supervised the setting of a Baker Model "D" Prod. Packer
Make and Type of Packer
in MONSANTO COMPANY, Lowe-State,
Operator of Well Lease Name

Well No. 1 located in the Indian Basin,
Field
Eddy County, New Mexico, at a subsurface depth of 9265
~~Texas~~
feet, said depth measurement having been furnished me by McCullough

Tool Company; that the purpose of setting this packer was to
effect a seal in the annular space between the two strings of pipe where the
packer was set so as to prevent the commingling, in the bore of this well, of
fluids produced from a stratum below the packer with fluids produced from a
stratum above the packer; that this packer was properly set and that it did,
when set, effectively and absolutely seal off the annular space between the
two strings of pipe where it was set in such manner as that it prevented any
movement of fluids across the packer.

STATE OF TEXAS
COUNTY OF Midland

Before me, the undersigned authority, on this day personally appeared
C. K. Reeves, known to me to be the person whose
name is subscribed to this instrument, who after being by me duly sworn on
oath, states that he has knowledge of all the facts stated above and that
the same is a true and correct statement of the facts therein recited.

C. K. Reeves
Subscribed and sworn to before me on this the 29th day
of October, 1964.

Leitta Phillips
Notary Public in and for
Midland County, Texas