

BEFORE THE INDUSTRIAL COMMISSION

OF THE STATE OF NORTH DAKOTA

CASE NO. 7217
ORDER NO. 8427

IN THE MATTER OF A HEARING
CALLED ON A MOTION OF THE
COMMISSION TO CONSIDER THE
APPLICATION OF LYCO OPERATING
COMPANY FOR AN ORDER AMENDING
THE FIELD RULES FOR THE
BURG-SILURIAN POOL SO AS TO
AUTHORIZE THE FLARING OF GAS
FROM THE PLUMER-LUNDQUIST #25-2
WELL, LOCATED IN THE NW/4 NE/4 OF
SECTION 25, T.161N., R.99W, DIVIDE
COUNTY, NORTH DAKOTA, WITHOUT
REGARD TO THE PRODUCTION
RESTRICTIONS PROVIDED BY
PARAGRAPH 12 OF COMMISSION ORDER
NO. 8351.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

(1) This cause came on for hearing at 9:00 a.m. on the 24th day of February, 1999.

(2) Lyco Operating Company (Lyco) is the operator of the Plumer-Lundquist #25-2 well located in the NW/4 NE/4 of Section 25, Township 161 North, Range 99 West, Divide County, North Dakota.

(3) The Plumer-Lundquist #25-2 well was completed in the Burg-Silurian Pool on June 15, 1998. Gas is produced in association with the oil.

(4) Order No. 8351 allows all wells in the Burg-Silurian Pool to produce at an unrestricted rate for a period of 60 days commencing on the first day oil is produced through well-head equipment into tanks from the ultimate producing interval after casing has been run; after that, oil production from such wells is not to exceed an average of 200 barrels per day for a period of 60 days; after that, oil production from such wells is not to exceed an average of 150 barrels per day for a period of 60 days, thereafter, oil production from such wells is not to exceed an average of 100 barrels of oil per day; if and when such wells are connected to a gas gathering and processing facility the foregoing restrictions are to be removed, and the wells allowed to produce at a maximum efficient rate.

(5) Lyco requested that the Plumer-Lundquist #25-2 well be allowed to produce oil at an unrestricted rate and flare any surplus gas produced therewith.

(7) One gas gatherer in the area has declined to submit a bid on connecting this well to a gas gathering facility due to the limited available volumes. A cost analysis using another gas gatherer in the area

appears to demonstrate that this well economically cannot be connected to a gas gathering facility.

(8) Since the well economically cannot be connected to a gas gathering facility, no waste will occur if the gas is flared and the well is allowed to produce oil at an unrestricted rate.

(9) The value of the oil produced far exceeds the value of the gas flared if the well is allowed to produce at a maximum efficient rate.

(10) Lyco should be allowed to produce the Plumer-Lundquist #25-2 well at a maximum efficient rate and flare any surplus gas produced therewith.

(11) That in order to prevent waste and protect correlative rights, this application should be granted.

IT IS THEREFORE ORDERED:

(1) The Plumer-Lundquist #25-2 well, located in the NW/4 NE/4 of Section 25, Township 161 North, Range 99 West, Divide County, North Dakota is hereby allowed to produce at an unrestricted rate and to flare any gas produced therewith as an exception to the applicable orders for the Burg-Silurian Pool.

(2) This order shall remain in full force and effect until further order of the Commission.

Dated this 17th day of March, 1999.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

/s/ Edward T. Schafer, Governor

/s/ Heidi Heitkamp, Attorney General

/s/ Roger Johnson, Commissioner of Agriculture

STATE OF NORTH DAKOTA)
)
COUNTY OF BURLEIGH)
)

AFFIDAVIT OF MAILING

I, Donna Bauer, being duly sworn upon oath, depose and say: That on the 19th day of March 1999, enclosed in separate envelopes true and correct copies of the attached Order No. 8427 of the North Dakota Industrial Commission, and deposited the same with the United States Postal Service in Bismarck, North Dakota, with postage thereon fully paid, directed to the following persons by the Industrial Commission in Case No. 7217 :

John Morrison
Fleck, Mather & Strutz Ltd.
P. O. Box 2798
Bismarck, ND 58502

Lawrence Bender
Pearce & Durick
P. O. Box 400
Bismarck, ND 58502

John Lee
Crowley Law Office
P. O. Box 1206
Williston, ND 58802

Lyco Operating Co.
6688 N. Central Expressway
Suite 1600
Dallas, TX 75206-3927

Donna Bauer
Donna Bauer
Oil & Gas Division

On this 19th day of March 1999, before me personally appeared Donna Bauer to me known as the person described in and who executed the foregoing instrument and acknowledged that she executed the same as her free act and deed.

Erie Robinson
Notary Public
State of North Dakota County of Burleigh
My Commission expires 11.3.2004

7217
7218

CROWLEY, HAUGHEY, HANSON, TOOLE & DIETRICH P.L.L.P.

ATTORNEYS AT LAW

113 EAST BROADWAY
P.O. BOX 1206

WILLISTON, ND 58802-1206
TELEPHONE (701) 572-2200

480 NORTH 31ST STREET
P.O. BOX 2529
BILLINGS, MT 59103-2529
PHONE (406) 252-3441

100 NORTH PARK AVENUE
SUITE 300, P.O. BOX 797
HELENA, MT 59624
PHONE (406) 449-4165

401 FIRST AVENUE WEST
P.O. BOX 759
KALISPELL, MT 59903-0759
PHONE (406) 752-6644

CALE CROWLEY
(1912-1997)

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JEFFREY A. COOP
KEN A. EALVIG
KELLIE M. GASTON
ASHLEY BURLISON
IAN MCINTOSH
GARY M. CONNELLEY
KRISTIN L. OMVIG

February 1, 1999

Ms. Karlene Fine
Executive Director and Secretary
North Dakota Industrial Commission
Capitol Building, 10th Floor
600 East Boulevard
Bismarck, North Dakota 58505-0310

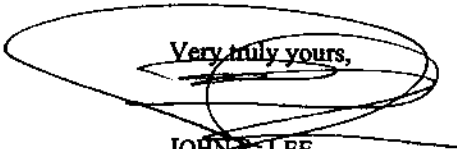
Re: Application for Flaring Relief - Lyco Operating Company Case Nos. 7217 and 7218

Dear Ms. Fine:

Enclosed herewith for consideration by the Commission at the Commission's regularly scheduled hearing on February 24, 1999, is the Affidavit of Charles B. Wiley (two originals) of Lyco Operating Company. As set forth in the affidavit, Lyco respectfully requests that the Commission exempt associated casinghead gas produced from the Plumer-Lundquist #25-2 well from the provisions of Section 38-08-06.4, N.D.C.C., and from the provisions of Section (12) of Commission Order No. 8351.

I would request that this affidavit be made part of the record in Case Nos. 7217 and 7218, as I presently do not plan to be present in Bismarck to participate in those dockets. Although I believe the averments as contained in the Affidavit are sufficient for purposes of the Commission granting the requested relief, if the Commission or staff require supplemental information from Mr. Wiley, I would ask that the record in these cases be left open for purposes of furnishing such additional evidence. In additional, much of the testimony set forth in the affidavit was presented to the Commission in connection with the hearing of Case No. 7145.

Thank you for your assistance. If you have any questions, please feel free to contact the undersigned at your convenience.

Very truly yours,

JOHN R. LEE

Enclosures

cc: Mr. James W. Hyink (w/o encl.)
Mr. Lynn D. Helms (w/encl.)
Mr. F.E. (Jack) Wilborn (w/encl.)

BEFORE THE INDUSTRIAL COMMISSION OF THE STATE OF NORTH DAKOTA

IN THE MATTER OF THE APPLICATION OF LYCO OPERATING COMPANY FOR AN ORDER OF THE COMMISSION (1) AMENDING THE FIELD RULES FOR THE BURG-SILURIAN POOL SO AS TO AUTHORIZE THE FLARING OF GAS FROM THE PLUMER - LUNDQUIST #25-2 WELL WITHOUT REGARD TO THE PRODUCTION RESTRICTIONS PROVIDED BY SECTION (12) OF COMMISSION ORDER NO. 8351, AND (2) AUTHORIZING THE FLARING OF GAS FROM THE PLUMER-LUNDQUIST #25-2 WELL AS AN EXCEPTION TO THE PROVISIONS OF SECTIONS 38-08-06.4 OF THE NORTH DAKOTA CENTURY CODE, AND/OR SUCH OTHER AND FURTHER RELIEF AS THE COMMISSION DEEMS APPROPRIATE

CASE NO. _____

AFFIDAVIT OF
CHARLES B. WILEY

STATE OF TEXAS)
 : ss
COUNTY OF)

CHARLES B. WILEY, being first duly sworn, deposes and states as follows:

1. I am employed as a Petroleum Engineer with Lyco Operating Company ("Lyco"), 6688 North Central Expressway, Suite 1600, Dallas, TX 75206-3927, and am percipient to testify to the facts set forth hereinafter.
2. Lyco is the operator of the Plumer - Lundquist #25-2 well, the spacing unit for which was established by Commission Order No. 8351 as comprised of the SE/4 of Section 24, and the NE/4 of Section 25, in Township 161 North, Range 99 West, 5th P.M., Divide County, North Dakota.
3. The Burg - Silurian Pool is an oil reservoir, but small amounts of gas are produced in association with crude oil at the wellhead as a by-product of oil production.
4. The Plumer - Lundquist #25-2 well is currently not connected to a gas gathering facility, and all casinghead gas being produced by said well and not being used for lease operations is being flared.
5. Attached to this Affidavit are Exhibits 1 through 6, each of which was prepared by me, or by others under my supervision or control, and each of which is true and correct to the best of my knowledge and belief. Your Affiant respectfully requests that Exhibits 1 through 6 be accepted in evidence, together with this Affidavit, in support of the Application of Lyco filed with the Commission in this case.
6. Exhibit 1 is a "Well Data" sheet setting forth pertinent well data concerning the Plumer-Lundquist #25-2 well. This exhibit was previously submitted and accepted in evidence in North Dakota Industrial Commission Case No. 7145.
7. Exhibit 2 is a "Volumetric Analysis" which calculates out the reserves for the Plumer - Lundquist #35-2 well using the parameters set forth in Exhibit 1. As can be seen from this exhibit, the gas reserves on the Plumer-Lundquist #25-2 well are calculated at 65, 572 MCF, with 58,097 MCF available for sale.

8. Exhibit 3 is styled "Gas Flaring Exemption Data", and is an economics summary setting forth pertinent information concerning gas production rates and remaining reserves thereof, pricing, gas used for lease operations, costs associated with connecting the Plumer-Lundquist #25-2 well to a gas line, and net undiscounted cash flow reflecting a gas sales connection. As the exhibit clearly demonstrates, the surplus casinghead presently being produced by the Plumer-Lundquist #25-2 well and the estimated recoverable reserves from the well are insufficient to recoup the costs of installing and operating a gas sales line, and project cash flow will be reduced by approximately \$8,779.49 if a gas sales line must be installed under current market conditions. Exhibits 3a, 3b and 3c are submitted as backup data for the summarized information set forth in Exhibit 3.

9. Exhibit 4 is an explanatory letter previously furnished to the Commission in connection with Case No. 7145. Significantly, as you may note from the second page of my letter, Amerada Hess declined to submit a bid to purchase casinghead gas from the Plumer - Lundquist #25-2 well due to the limited available volumes.

10. Exhibit 5 is a "Gas Measurement Test" conducted on the Plumer - Lundquist #25-2 well by Ron Evitt, a petroleum engineer with Double EE Service, Inc., an independent consulting firm, which reflects that the average gas flowrate (As of December 2-3, 1998) was 29.80 MCFD, which figure supports the Daily Salable Gas figure set forth in Exhibit 3. Exhibit 6 is simply a photocopy of the "Gas-Oil Ratio Report-Form 9" previously filed with the Commission by Mr. Evitt evidencing the gas measurement test results.

11. It is Affiant's opinion as an expert in the field of petroleum engineering that if the application of Lyco in this case is not granted as submitted, that (i) taxes and royalties which must be paid of flared gas will increase operating costs, raise the economic limit and cause premature abandonment of the well; (ii) that if the well must be connected to a gas sales line at an economic loss this will also result in premature abandonment; and (iii) that if flaring must cease at some future time under the current provisions of Paragraph 12, Order No. 8351 and the well "capped," it will result in the loss of oil production and the loss of benefits of that production by all owners of interests in the Plumer - Lundquist #25-2 well, as well as the State of North Dakota.

12. Inquiries regarding this Affidavit and the application related thereto may be directed either to the undersigned at (214) 890-4400, or Lyco's attorney, John R. Lee, at (701) 572-2200.

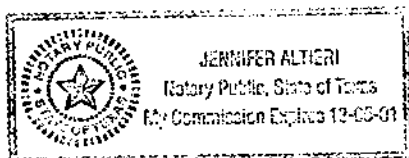
Further Affiant Sayeth not.

DATED this 26th day of January, 1999.

Charles B. Wiley
CHARLES B. WILEY

STATE OF TEXAS)
) : ss
COUNTY OF _____)

On this 26th day of January, 1999, before me, a Notary Public for the State of Texas, personally appeared Charles B. Wiley, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same.



(SEAL)

Jennifer Altieri
Notary Public
Residing at Dallas, Texas
My commission expires December 5, 2001

WELL DATA

1) OPERATOR

Lyc0 Operating Co.
North Central Expressway
Suite 1600
Dallas, TX 75206-3927

2) REQUESTED SPACING

320 acre spacing
spacing unit for discovery well: SE/4 24, NE/4 25, T161N-R99W, Divide Co, ND
660' set back from spacing unit boundary
1980' between wells

3) FORMATION TO BE SPACED

Silurian Interlake Formation from the Top of the Interlake to the Base of the Interlake or what ever interval the Commission deems releavelent

4) AREA TO BE SPACED

T161N-R99W
Section 24, SE/4
Section 25, NE/4

5) DISCOVERY WELL

Lyc0 Opersting Co.
Lundquist #25-2
(120' FNL, 1680' FEL)
NE/4 25, T161N-R99W
Divide Co., ND

6) CASING INFORMATION

Surface Casing: 9 5/8" casing set @ 1644', cemented w/1500 sx
(Cement Top @ Surface)
Production Casing: 5 1/2" casing set @ 11670', cemented w/2560 sx
(Cement Top @ 3230')
Production Tubing: 2 7/8" anchored @ 10404', Model 'R' packer @ 11404

7) RESERVOIR DATA

Trap Type:	Structural
Datum:	-8323'
Initial Reservoir Pressure	4940#
Oil Gravity:	45 API
Oil Gas Ratio:	158 CF/BBL
Reservoir Temperature:	223 °F
Gross Pay:	37'
Avg. Porosity of Gross Pay:	14%
Estimated Sw:	25%
Reservoir Drive Mechanism:	Solution Gas & Water Drive
Resistivity of Produced Water:	0.51 @ 67 °F, 200,000 ppm Cl ₂
Formation Volumn Factor:	1.2 RB/STB
Perforated Interval:	10440-10445'



Initial Potential: 10453-10458'
10461-10468'
240 BOPD
0 BSWPD
38 MCFGPD

Current Producing Rate: 140 BOPD
103 BSWPD
23 MCFGPD
Flowing @ 200# Flowing Tubing Pressure

Cum. Production (from 6/16/98 to 10/11/98)
24585 BO
3408 BSW
3885 MCF

Disposition of Fluids: Oil, Sold to Murphy Oil Company
Water, Trucked to approved SWD in Ambrose Field
Gas, Flared

Electric Logs: DLL-MSFL-GR-CALIP
FDC-CNL-GR-CALIP
BHCI Sonic-GR-CALIP
CBL-GR
(All logs on file with the NDIC)

8) RESERVE DATA

Estimated OOIP: 2.536 Million Barrels
Potential Productive Area: 101 Acres
Estimated Recoverable Oil: 415,000 BO
Estimated recoverable gas: 65,500 MCF
Development Costs: \$1,100,000
Estimated return on Investment: 4.2-1

VOLUMETRIC ANALYSIS
OIL RESERVOIR WITH SOLUTION GAS

OPERATOR: LYCO ENERGY CORP.
WELL NAME: LUNDQUIST #25-2
FIELD: PLUMBER
LOCATION: NWNW 25, T161N-R99W
COUNTY: DIVIDE
STATE: NORTH DAKOTA
FORMATION: INTERLAKE

BASIC DATA & ESTIMATED RESERVES

DATUM:	-8323 FEET
RESERVOIR PRESSURE:	4940 PSI
RESERVOIR TEMPERATURE:	223 DEGREES F
AVERAGE POROSITY:	14.00%
AVERAGE CONATE WATER SATURATION:	25.00%
OIL GRAVITY (API @ 60 DEGREES F):	45 DEGREES API
SOLUTION GOR (CUBIC FEET/BBL):	158 CUBIC FEET/BBL
FORMATION VOLUME FACTOR:	1.2
SPACING UNIT (ACRES):	101 ACRES
RECOVERY FACTOR:	16.36%
RESERVOIR THICKNESS:	37 FEET
OIL IN PLACE:	2,536,769 BARRELS OIL
RECOVERABLE OIL:	415,015 STOCK TANK BARRELS
RECOVERABLE SOLUTION GAS:	65,572 MCF GAS
LEASE USE GAS	11.4%
GAS AVAILABLE FOR SALE	58097 MCF GAS

EXHIBIT

2

GAS FLARING EXEMPTION DATA

GAS CONTRACT DATA:

Potential Purchaser:	Custom Energy Construction, Inc. Amerada Hess Corp.
Gas Sales Price	\$ 0.53 per MMBTU
Connecting Costs (as per Purchaser):	\$ 57,000.00
Daily Salable Gas:	31 MCFGPD
Lease Gas Usage:	4 MCFGPD
GOR (as determined by Amerada Hess)	1567
Gas Value Adjusted for BTU:	\$ 0.83 MCF
Est. Ultimate Gas Reserves (see Vol. Analysis)	58097 MCF
Estimated value of Gas Reserves	\$ 48,220.51
Gas Value (Sales Value - Connection Costs):	-\$ 8,779.49

Lyco-Plumer Lindquist.txt

AMERADA HESS CORPORATION

TIOGA GAS PLANT

SETTLEMENT TEST

Well # : PLUMER LINDQUIST Analysis Date : Jul 30 1998
Producer : LYCO Date Sample Taken: 07-28-98
Secured by : KN Effective Date :
Pressure : 32 PSI Temperature : 82 F

Chromatogram 1: \7SETT\PLUM_01.A01
Chromatogram 2: \7SETT\PLUM_01.A02

Component Name	Mole %	GPM
Carbon Dioxide	2.819	
Nitrogen	11.267	
Methane	38.396	
Hydrogen Sulfide	.010	
Ethane	18.498	
Propane	17.189	4.731
Iso-butane	3.268	1.069
N-Butane	5.387	1.698
Iso-pentane	.980	.359
N-Pentane	1.371	.496
Hexanes Plus	.815	.358

GPM for Pentanes+: 1.213
GPM for Butanes+ : 3.980
GPM for Propane+ : 8.711

Test Correlation: 1.725

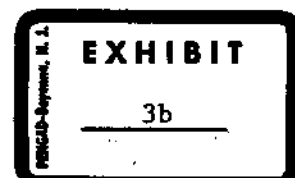
Calc BTUs@ 14.73 Psia (Dry Basis): 1567

Specific Gravity (Measured - Ramarex) : .000
Specific Gravity (Calculated w/H2S - Ideal): 1.078
Specific Gravity (Calculated w/H2S - Real) : 1.084

tribution

Master Files - Plant
Producer
Gas Measurement- AHC Houston
Field Files - Hawkeye
Kathi Rossland - AHC Williston

Remarks:



Test Dates: July 20-28, 1998
 Orifice Size: 0.75"
 Volumes not Adjusted for Temperature, Visual Chart Readings

		Static	Differential	Coef.	Daily Rate
7/21/98 Gas	High	9.8	4	1.499	58.8 MCFD
	Low	9.8	2.5	1.499	36.7 MCFD
	Average	9.8	2.75	1.499	40.4 MCFD
Oil					257 BBL
Water					0 BBL
GOR					157 SCF/B
7/22/98 Gas	High	9.8	4	1.499	58.8 MCFD
	Low	9.8	2.25	1.499	33.1 MCFD
	Average	9.8	2.5	1.499	36.7 MCFD
Oil					249 BBL
Water					0 BBL
GOR					147 SCF/B
7/23/98 Gas	High	9.8	3	1.499	44.1 MCFD
	Low	9.8	2.2	1.499	32.3 MCFD
	Daily	9.8	2.3	1.499	33.8 MCFD
Oil					229 BBL
Water					0 BBL
GOR					148 SCF/B
7/24/98 Gas	High	9.8	3.2	1.499	47.0 MCFD
	Low	9.8	2.3	1.499	33.8 MCFD
	Daily	9.8	2.4	1.499	35.3 MCFD
Oil					225 BBL
Water					0 BBL
GOR					157 SCF/B
7/25/98 Gas	High	9.8	4	1.499	58.8 MCFD
	Low	9.8	2.2	1.499	32.3 MCFD
	Daily	9.8	2.7	1.499	39.7 MCFD
Oil					224 BBL
Water					0 BBL
GOR					177 SCF/B
7/26/98 Gas	High	9.8	2.7	1.499	39.7 MCFD
	Low	9.8	2.3	1.499	33.8 MCFD
	Daily	9.8	2.4	1.499	35.3 MCFD
Oil					248 BBL
Water					0 BBL
GOR					142 SCF/B
7/27/98 Gas	High	9.8	2.8	1.499	41.1 MCFD
	Low	9.8	2.3	1.499	33.8 MCFD
	Daily	9.8	2.4	1.499	35.3 MCFD
Oil					212 BBL
Water					0 BBL
GOR					166 SCF/B
7/28/98 Gas	High	9.8	6	1.499	88.1 MCFD
	Low	9.8	1.4	1.499	20.6 MCFD
	Daily	9.8	3	1.499	44.1 MCFD
Oil					262 BBL
Water					0 BBL
GOR					168 SCF/B

LYCO OPERATING COMPANY

Brian J. Wright
Project Engineer

Industrial Commission Of North Dakota, Oil and Gas Division
900 E Blvd.
Bismarck, ND 58505

Gentlemen:

Re: Case # 7145, October, 20, 1998

In response to Red River "C" gas production potential questions regarding Case #7145, Lyco Operating Company submits the following information.

The Red River "C" zone was initially on production in late February of 1998. Production declined rapidly and salt water production began to increase. A 500 gallon acid cleanup resulted in a marginally economic operation in the Red River "C" which produced 48 BO, 204 BSW, and flared an estimated 40-45 MCF of gas on the last day of Red River "C" production, June 11, 1998. The Red River was subsequently isolated behind a bridge plug and the Interlake zone was perforated and is the current producing interval.

Reservoir pressures recorded during pressure build up testing indicates that the Interlake (4,920 psi @ 10,471' datum or .469 psi/ft gradient [on 9/21/98]) and the Red River (5,180 psi @ 11,267' datum or 0.459 psi/ft gradient [on 2/16/98]) will exhibit cross flow if co-mingled due to a very strong water drive in the Interlake. This strong water drive is confirmed by no decline in the original DST BHP, after over 90 days of production.

For the above reason, Lyco will make no attempt to co-mingle the production between the Interlake and the Red River zones in the Plumer-Lundquist #25-2. Current plans are to produce the Interlake until it becomes unprofitable, then evaluate additional shallower potential.

Clarification of an additional point has been requested regarding the gas bid tendered for the subject well. The original bid was submitted by Custom Energy of Casper, Wyoming from which the installation costs and gas prices submitted were obtained. The actual gas volume test was conducted by Amerada Hess which declined to submit a bid due to limited available volumes.

Please contact me at the below address with any questions.

Regards,



Brian Wright
Project Engineer

Double **EE** Service, Inc.

Oilfield Production Sales & Service
and Manufacturer's Representative
2210 4th Avenue West
WILLISTON, NORTH DAKOTA 58802

LYCO OPERATING CO.

GAS MEASUREMENT TESTS GAS-OIL RATIO DETERMINATION WATER-OIL RATIO DETERMINATION

WELL NAME : PLUMER-LUNDQUIST #25-2
COUNTY & STATE : DIVIDE COUNTY, NORTH DAKOTA
FIELD NAME : BURG

WELL FILE NO. : 14775
POOL : SILURIAN
LOCATION : NW NE SEC. 25 - T161N - R99W

TESTS RUN BY : RON EVITT
DOUBLE EE SERVICE, INC.
P.O. BOX 2417
WILLISTON, ND 58802-2417

EQUIPMENT USED : CLIFF MOCK PRESSURE RECORDER
RECORDER SIZE -----> 0 TO 50 PSI
2 INCH WELL TESTER
PLATE SIZE -----> 0.250 INCH

GAS SOURCE : GAS LINE FROM TREATER
GAS SPECIFIC GRAVITY : 0.900 (AIR = 1.00) ASSUMED, NO GAS TEST AVAILABLE
TEMPERATURE OF GAS : 39 DEG. F

FLOWRATES REPORTED AT : 14.73 PSIA AND 60 DEG. F.
LENGTH OF TEST : 24 HOURS

RESULTS:

TEST DATE -----> 12/2 TO 12/3/98

OIL PRODUCTION FOR 24 HOURS -----> 95.19 BARRELS
SALTWATER PRODUCTION FOR 24 HOURS -----> 250 BARRELS

AVERAGE GAS FLOWRATE TO METER -----> 8.05 MCF/DAY
AVERAGE GAS FLOWRATE TO TREATER BURNER, (MEASURED) -----> 15.75 MCF/DAY
AVERAGE GAS FLOWRATE TO AJAX ENGINE (FROM PREV TEST) -----> 6.00 MCF/DAY

TOTAL GAS FLOWRATE -----> 29.80 MCF/DAY
GAS-OIL RATIO -----> 313.10 SCF/STB
WATER-OIL RATIO -----> 2.63 BBL/BBL

ADDITIONAL OBSERVATIONS:

PUMPING UNIT IS ROD HEAVY.
UPSTROKE WAS TIMED AT 5.47 SECOND AVERAGE.
DOWNSTROKE WAS TIMED AT 4.34 SECOND AVERAGE.
PEAK TORQUE CAN BE REDUCED BY MOVING COUNTERWEIGHTS OUT ON CRANKARM.

SUBMITTED BY: RON EVITT, PETROLEUM ENGINEER





GAS-OIL RATIO REPORT - FORM 9
INDUSTRIAL COMMISSION OF NORTH DAKOTA
OIL AND GAS DIVISION
 SFN 5755 (2-92)

INSTRUCTIONS

The original and one copy of this report must be submitted to the OIL AND GAS DIVISION, 600 EAST BOULEVARD, BISMARCK, ND 58505.

All volumes must be corrected to 60 degrees F. and 14.73 PSIA.

Name of Operator Lyco Operating Company		Field Burg	Pool Silurian	
Address 6688 N. Central Exprsway, Suite 1600		City Dallas		State - Zip Code TX 75206-3927
Equipment Used Cliff Mock Prss Recorder & 2" Well Tester			Month / Year Dec 98	

WELL NAME AND NUMBER	WELL FILE NO.	DATE OF TEST	PROD. METHOD	CHOKE SIZE	TEST HOURS	DAILY ALLOW BBLs.	PRODUCED DURING TEST			GOR. SCF/ STB
							WATER BBLs.	OIL BBLs.	GAS MCF	
Plumer-Lundquist #25-2	14775	12/2	Pump	---- Orif. Plate Size 0.250 inch	24	---	250	95.19	29.8	313.1

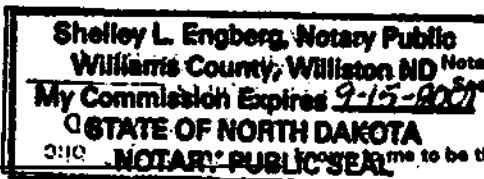
Name(s) of Person(s) Making Above Tests Ron Evitt	Name of Company or Operator Double EE Serv./Evitt Oper & Cons.
---	--

I certify that the above information is true and correct.

Signature 	Title Petroleum Engineer	Date 12/4/98
---------------	------------------------------------	------------------------

STATE OF North Dakota
 COUNTY OF Williams

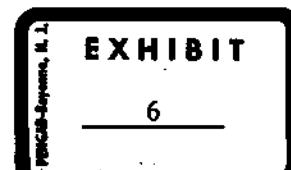
On Dec 4th 19 98, Ron Evitt



executed the foregoing instrument, personally appeared before me and acknowledged that (s)he executed the same as a free act and deed.

Shelley L. Engberg
 Notary Public

My Commission Expires Sept. 15, 2001



BEFORE THE INDUSTRIAL COMMISSION OF THE STATE OF NORTH DAKOTA

IN THE MATTER OF THE APPLICATION OF LYCO OPERATING COMPANY FOR AN ORDER OF THE COMMISSION (1) AMENDING THE FIELD RULES FOR THE BURG-SILIARIAN POOL SO AS TO AUTHORIZE THE FLARING OF GAS FROM THE PLUMER - LUNDQUIST #25-2 WELL WITHOUT REGARD TO THE PRODUCTION RESTRICTIONS PROVIDED BY SECTION (12) OF COMMISSION ORDER NO. 8351, AND (2) AUTHORIZING THE FLARING OF GAS FROM THE PUMER-LUNDQUIST #25-2 WELL AS AN EXCEPTION TO THE PROVISIONS OF SECTIONS 38-08-06.4 OF THE NORTH DAKOTA CENTURY CODE, AND/OR SUCH OTHER AND FURTHER RELIEF AS THE COMMISSION DEEMS APPROPRIATE

CASE NO. _____

AFFIDAVIT OF
CHARLES B. WILEY

STATE OF TEXAS)
 : ss
COUNTY OF)

CHARLES B. WILEY, being first duly sworn, deposes and states as follows:

1. I am employed as a Petroleum Engineer with Lyco Operating Company ("Lyco"), 6688 North Central Expressway, Suite 1600, Dallas, TX 75206-3927, and am percipient to testify to the facts set forth hereinafter.
2. Lyco is the operator of the Plumer - Lundquist #25-2 well, the spacing unit for which was established by Commission Order No. 8351 as comprised of the SE/4 of Section 24, and the NE/4 of Section 25, in Township 161 North, Range 99 West, 5th P.M., Divide County, North Dakota.
3. The Burg - Silurian Pool is an oil reservoir, but small amounts of gas are produced in association with crude oil at the wellhead as a by-product of oil production.
4. The Plumer - Lundquist #25-2 well is currently not connected to a gas gathering facility, and all casinghead gas being produced by said well and not being used for lease operations is being flared.
5. Attached to this Affidavit are Exhibits 1 through 6, each of which was prepared by me, or by others under my supervision or control, and each of which is true and correct to the best of my knowledge and belief. Your Affiant respectfully requests that Exhibits 1 through 6 be accepted in evidence, together with this Affidavit, in support of the Application of Lyco filed with the Commission in this case.
6. Exhibit 1 is a "Well Data" sheet setting forth pertinent well data concerning the Plumer-Lundquist #25-2 well. This exhibit was previously submitted and accepted in evidence in North Dakota Industrial Commission Case No. 7145.
7. Exhibit 2 is a "Volumetric Analysis" which calculates out the reserves for the Plumer - Lundquist #35-2 well using the parameters set forth in Exhibit 1. As can be seen from this exhibit, the gas reserves on the Plumer-Lundquist #25-2 well are calculated at 65, 572 MCF, with 58,097 MCF available for sale.

8. Exhibit 3 is styled "Gas Flaring Exemption Data", and is an economics summary setting forth pertinent information concerning gas production rates and remaining reserves thereof, pricing, gas used for lease operations, costs associated with connecting the Plumer-Lundquist #25-2 well to a gas line, and net undiscounted cash flow reflecting a gas sales connection. As the exhibit clearly demonstrates, the surplus casinghead presently being produced by the Plumer-Lundquist #25-2 well and the estimated recoverable reserves from the well are insufficient to recoup the costs of installing and operating a gas sales line, and project cash flow will be reduced by approximately \$8,779.49 if a gas sales line must be installed under current market conditions. Exhibits 3a, 3b and 3c are submitted as backup data for the summarized information set forth in Exhibit 3.

9. Exhibit 4 is an explanatory letter previously furnished to the Commission in connection with Case No. 7145. Significantly, as you may note from the second page of my letter, Amerada Hess declined to submit a bid to purchase casinghead gas from the Plumer - Lundquist #25-2 well due to the limited available volumes.

10. Exhibit 5 is a "Gas Measurement Test" conducted on the Plumer - Lundquist #25-2 well by Ron Evitt, a petroleum engineer with Double EE Service, Inc., an independent consulting firm, which reflects that the average gas flowrate (As of December 2-3, 1998) was 29.80 MCFD, which figure supports the Daily Salable Gas figure set forth in Exhibit 3. Exhibit 6 is simply a photocopy of the "Gas-Oil Ratio Report-Form 9" previously filed with the Commission by Mr. Evitt evidencing the gas measurement test results.

11. It is Affiant's opinion as an expert in the field of petroleum engineering that if the application of Lyco in this case is not granted as submitted, that (i) taxes and royalties which must be paid of flared gas will increase operating costs, raise the economic limit and cause premature abandonment of the well; (ii) that if the well must be connected to a gas sales line at an economic loss this will also result in premature abandonment; and (iii) that if flaring must cease at some future time under the current provisions of Paragraph 12, Order No. 8351 and the well "capped," it will result in the loss of oil production and the loss of benefits of that production by all owners of interests in the Plumer - Lundquist #25-2 well, as well as the State of North Dakota.

12. Inquiries regarding this Affidavit and the application related thereto may be directed either to the undersigned at (214) 890-4400, or Lyco's attorney, John R. Lee, at (701) 572-2200.

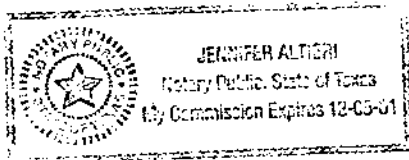
Further Affiant Sayeth not.

DATED this 26th day of January, 1999.

Charles B. Wiley
CHARLES B. WILEY

STATE OF TEXAS)
) : ss
COUNTY OF _____)

On this 26th day of January, 1999, before me, a Notary Public for the State of Texas, personally appeared Charles B. Wiley, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same.



(SEAL)

Jennifer Altieri
Notary Public
Residing at Wallas, Texas
My commission expires December 5, 2001

WELL DATA

- 1) OPERATOR**
Lyco Operating Co.
North Central Expressway
Suite 1600
Dallas, TX 75206-3927
- 2) REQUESTED SPACING**
320 acre spacing
spacing unit for discovery well: SE/4 24, NE/4 25, T161N-R99W, Divide Co, ND
660' set back from spacing unit boundary
1980' between wells
- 3) FORMATION TO BE SPACED**
Silurian Interlake Formation from the Top of the Interlake to the Base of the Interlake or what ever interval the Commission deems releavelent
- 4) AREA TO BE SPACED**
T161N-R99W
Section 24, SE/4
Section 25, NE/4
- 5) DISCOVERY WELL**
Lyco Opersting Co.
Lundquist #25-2
(120' FNL, 1680' FEL)
NE/4 25, T161N-R99W
Divide Co., ND
- 6) CASING INFORMATION**
Surface Casing: 9 5/8" casing set @ 1644', cemented w/1500 sx
(Cement Top @ Surface)
Production Casing: 5 1/2" casing set @ 11670', cemented w/2560 sx
(Cement Top @ 3230')
Production Tubing: 2 7/8" anchored @ 10404', Model 'R' packer @ 11404
- 7) RESERVOIR DATA**
- | | |
|--------------------------------|---|
| Trap Type: | Structural |
| Datum: | -8323' |
| Initial Reservoir Pressure | 4940# |
| Oil Gravity: | 45 API |
| Oil Gas Ratio: | 158 CF/BBL |
| Reservoir Temperature: | 223 °F |
| Gross Pay: | 37' |
| Avg. Porosity of Gross Pay: | 14% |
| Estimated Sw: | 25% |
| Reservoir Drive Mechanism: | Solution Gas & Water Drive |
| Resistivity of Produced Water: | 0.51 @ 67 °F, 200,000 ppm Cl ₂ |
| Formation Volumn Factor: | 1.2 RB/STB |
| Perforated Interval: | 10440-10445' |

EXHIBIT

1

Initial Potential: 10453-10458*
10461-10468*
240 BOPD
0 BSWPD
38 MCFGPD

Current Producing Rate: 140 BOPD
103 BSWPD
23 MCFGPD
Flowing @ 200# Flowing Tubing Pressure

Cum. Production (from 6/16/98 to 10/11/98)
24585 BO
3408 BSW
3885 MCF

Disposition of Fluids: Oil, Sold to Murphy Oil Company
Water, Trucked to approved SWD in Ambrose Field
Gas, Flared

Electric Logs: DLL-MSFL-GR-CALIP
FDC-CNL-GR-CALIP
BHCI Sonic-GR-CALIP
CBL-GR
(All logs on file with the NDIC)

8) RESERVE DATA

Estimated OOIP: 2.536 Million Barrels
Potential Productive Area: 101 Acres
Estimated Recoverable Oil: 415,000 BO
Estimated recoverable gas: 65,500 MCF
Development Costs: \$1,100,000
Estimated return on Investment: 4.2-1

VOLUMETRIC ANALYSIS
OIL RESERVOIR WITH SOLUTION GAS

OPERATOR: LYCO ENERGY CORP.
WELL NAME: LUNDQUIST #25-2
FIELD: PLUMBER
LOCATION: NWNW 25, T161N-R99W
COUNTY: DIVIDE
STATE: NORTH DAKOTA
FORMATION: INTERLAKE

BASIC DATA & ESTIMATED RESERVES

DATUM:	-8323 FEET
RESERVOIR PRESSURE:	4940 PSI
RESERVOIR TEMPERATURE:	223 DEGREES F
AVERAGE POROSITY:	14.00%
AVERAGE CONATE WATER SATURATION:	25.00%
OIL GRAVITY (API @ 60 DEGREES F):	45 DEGREES API
SOLUTION GOR (CUBIC FEET/BBL):	158 CUBIC FEET/BBL
FORMATION VOLUME FACTOR:	1.2
SPACING UNIT (ACRES):	101 ACRES
RECOVERY FACTOR:	16.36%
RESERVOIR THICKNESS:	37 FEET
OIL IN PLACE:	2,536,769 BARRELS OIL
RECOVERABLE OIL:	415,015 STOCK TANK BARRELS
RECOVERABLE SOLUTION GAS:	65,572 MCF GAS
LEASE USE GAS	11.4%
GAS AVAILABLE FOR SALE	58097 MCF GAS

EXHIBIT

2

FORMER-Byrd, M. J.

GAS FLARING EXEMPTION DATA

GAS CONTRACT DATA:

Potential Purchaser:

Custom Energy Construction, Inc.
Amerada Hess Corp.

Gas Sales Price

\$ 0.53 per MMBTU

Connecting Costs (as per Purchaser):

\$ 57,000.00

Daily Salable Gas:

31 MCFGPD

Lease Gas Usage:

4 MCFGPD

GOR (as determined by Amerada Hess)

1567

Gas Value Adjusted for BTU:

\$ 0.83 MCF

Est. Ultimate Gas Reserves (see Vol. Analysis)

58097 MCF

Estimated value of Gas Reserves

\$ 48,220.51

Gas Value (Sales Value - Connection Costs):

-\$ 8,779.49

EXHIBIT

3

Lyco-Plumar Lindquist.txt

AMERADA HESS CORPORATION
TIOGA GAS PLANT

SETTLEMENT TEST

Well # : PLUMER LINDQUIST Analysis Date : Jul 30 1998
Producer : LYCO Date Sample Taken: 07-28-98
Secured by : KN Effective Date :
Pressure : 32 PSI Temperature : 82 F

Chromatogram 1: \7SETT\PLUM_01.A01
Chromatogram 2: \7SETT\PLUM_01.A02

Component Name	Mole %	GPM
Carbon Dioxide	2.819	
Nitrogen	11.267	
Methane	38.396	
Hydrogen Sulfide	.010	
Ethane	18.498	
Propane	17.189	4.731
Iso-butane	3.268	1.069
N-Butane	5.387	1.698
Iso-pentane	.980	.359
N-Pentane	1.371	.496
Hexanes Plus	.815	.358

GPM for Pentanes+ : 1.213
GPM for Butanes+ : 3.980
GPM for Propanes+ : 8.711

Test Gas Correlation: 1.725

Calc BTUs@ 14.73 Psia (Dry Basis): 1567

Specific Gravity (Measured - Ramorex) : 1.000
Specific Gravity (Calculated w/H2S - Ideal): 1.078
Specific Gravity (Calculated w/H2S - Real) : 1.084

Distribution

Wells - Plant
Measurement- AMC Houston
Wells - Hawkeye
Roseland - AMC Williston

Remarks:

Page 1

EXHIBIT

3b

PERCISO-Byrnes, R. J.

Test Dates: July 20-28, 1998
 Orifice Size: 0.75"
 Volumes not Adjusted for Temperature, Visual Chart Readings

		Static	Differential	Coefl.	Daily Rate
7/21/98 Gas	High	9.8	4	1.499	58.8 MCFD
	Low	9.8	2.5	1.499	36.7 MCFD
	Average	9.8	2.75	1.499	40.4 MCFD
Oil					257 BBL
Water					0 BBL
GOR					157 SCF/B
7/22/98 Gas	High	9.8	4	1.499	58.8 MCFD
	Low	9.8	2.25	1.499	33.1 MCFD
	Average	9.8	2.5	1.499	36.7 MCFD
Oil					249 BBL
Water					0 BBL
GOR					147 SCF/B
7/23/98 Gas	High	9.8	3	1.499	44.1 MCFD
	Low	9.8	2.2	1.499	32.3 MCFD
	Daily	9.8	2.3	1.499	33.8 MCFD
Oil					229 BBL
Water					0 BBL
GOR					148 SCF/B
7/24/98 Gas	High	9.8	3.2	1.499	47.0 MCFD
	Low	9.8	2.3	1.499	33.8 MCFD
	Daily	9.8	2.4	1.499	35.3 MCFD
Oil					225 BBL
Water					0 BBL
GOR					157 SCF/B
7/25/98 Gas	High	9.8	4	1.499	58.8 MCFD
	Low	9.8	2.2	1.499	32.3 MCFD
	Daily	9.8	2.7	1.499	39.7 MCFD
Oil					224 BBL
Water					0 BBL
GOR					177 SCF/B
7/26/98 Gas	High	9.8	2.7	1.499	39.7 MCFD
	Low	9.8	2.3	1.499	33.8 MCFD
	Daily	9.8	2.4	1.499	35.3 MCFD
Oil					248 BBL
Water					0 BBL
GOR					142 SCF/B
7/27/98 Gas	High	9.8	2.8	1.499	41.1 MCFD
	Low	9.8	2.3	1.499	33.8 MCFD
	Daily	9.8	2.4	1.499	35.3 MCFD
Oil					212 BBL
Water					0 BBL
GOR					166 SCF/B
7/28/98 Gas	High	9.8	6	1.499	88.1 MCFD
	Low	9.8	1.4	1.499	20.6 MCFD
	Daily	9.8	3	1.499	44.1 MCFD
Oil					262 BBL
Water					0 BBL
GOR					168 SCF/B

LYCO OPERATING COMPANY

Brian J. Wright
Project Engineer

Industrial Commission Of North Dakota, Oil and Gas Division
900 E Blvd.
Bismarck, ND 58505

Gentlemen:

Re: Case # 7145, October, 20, 1998

In response to Red River "C" gas production potential questions regarding Case #7145, Lyco Operating Company submits the following information.

The Red River "C" zone was initially on production in late February of 1998. Production declined rapidly and salt water production began to increase. A 500 gallon acid cleanup resulted in a marginally economic operation in the Red River "C" which produced 48 BO, 204 BSW, and flared an estimated 40-45 MCF of gas on the last day of Red River "C" production, June 11, 1998. The Red River was subsequently isolated behind a bridge plug and the Interlake zone was perforated and is the current producing interval.

Reservoir pressures recorded during pressure build up testing indicates that the Interlake (4,920 psi @ 10,471' datum or 0.469 psi/ft gradient [on 9/21/98]) and the Red River (5,180 psi @ 11,267' datum or 0.459 psi/ft gradient [on 2/16/98]) will exhibit cross flow if co-mingled due to a very strong water drive in the Interlake. This strong water drive is confirmed by no decline in the original DST BHP, after over 90 days of production.

For the above reason, Lyco will make no attempt to co-mingle the production between the Interlake and the Red River zones in the Plumer-Lundquist #25-2. Current plans are to produce the Interlake until it becomes unprofitable, then evaluate additional shallower potential.



Clarification of an additional point has been requested regarding the gas bid tendered for the subject well. The original bid was submitted by Custom Energy of Casper, Wyoming from which the installation costs and gas prices submitted were obtained. The actual gas volume test was conducted by Amerada Hess which declined to submit a bid due to limited available volumes.

Please contact me at the below address with any questions.

Regards,



Brian Wright
Project Engineer

Double **EE** Service, Inc.

*Oilfield Production Sales & Service
and Manufacturer's Representative*
2210 4th Avenue West
WILLISTON, NORTH DAKOTA 58802

LYCO OPERATING CO.

GAS MEASUREMENT TESTS GAS-OIL RATIO DETERMINATION WATER-OIL RATIO DETERMINATION

WELL NAME : PLUMER-LUNDQUIST #25-2
 COUNTY & STATE : DIVIDE COUNTY, NORTH DAKOTA
 FIELD NAME : BURG

WELL FILE NO. : 14775
 POOL : SILURIAN
 LOCATION : NW NE SEC. 25 - T161N - R99W

TESTS RUN BY : RON EVITT
 DOUBLE EE SERVICE, INC.
 P.O. BOX 2417
 WILLISTON, ND 58802-2417

EQUIPMENT USED : CLIFF MOCK PRESSURE RECORDER
 RECORDER SIZE -----> 0 TO 50 PSI
 2 INCH WELL TESTER
 PLATE SIZE -----> 0.250 INCH

GAS SOURCE : GAS LINE FROM TREATER
 GAS SPECIFIC GRAVITY : 0.900 (AIR = 1.00) ASSUMED, NO GAS TEST AVAILABLE
 TEMPERATURE OF GAS : 39 DEG. F

FLOWRATES REPORTED AT : 14.73 PSIA AND 60 DEG. F.
 LENGTH OF TEST : 24 HOURS

RESULTS:

TEST DATE -----> 12/2 TO 12/3/98

OIL PRODUCTION FOR 24 HOURS -----> 95.19 BARRELS
 SALTWATER PRODUCTION FOR 24 HOURS -----> 250 BARRELS

AVERAGE GAS FLOWRATE TO METER -----> 8.05 MCF/DAY
 AVERAGE GAS FLOWRATE TO TREATER BURNER, (MEASURED) -----> 15.75 MCF/DAY
 AVERAGE GAS FLOWRATE TO AJAX ENGINE (FROM PREV TEST) -----> 6.00 MCF/DAY

TOTAL GAS FLOWRATE -----> 29.80 MCF/DAY
 GAS-OIL RATIO -----> 313.10 SQF/STB
 WATER-OIL RATIO -----> 2.63 BBL/BBL

ADDITIONAL OBSERVATIONS:

PUMPING UNIT IS ROD HEAVY.
 UPSTROKE WAS TIMED AT 5.47 SECOND AVERAGE.
 DOWNSTROKE WAS TIMED AT 4.34 SECOND AVERAGE.
 PEAK TORQUE CAN BE REDUCED BY MOVING COUNTERWEIGHTS OUT ON CRANKARM.

SUBMITTED BY: RON EVITT, PETROLEUM ENGINEER





GAS-OIL RATIO REPORT - FORM 9
INDUSTRIAL COMMISSION OF NORTH DAKOTA
OIL AND GAS DIVISION
 SFN 5755 (2-92)

INSTRUCTIONS

The original and one copy of this report must be submitted to the OIL AND GAS DIVISION, 800 EAST BOULEVARD, BISMARCK, ND 58505.

All volumes must be corrected to 80 degrees F. and 14.73 PSIA.

Name of Operator Lyco Operating Company		Field Burg	Pool Silurian	
Address 6688 N. Central Exprsway, Suite 1600		City Dallas	State TX	Zip Code 75206-3927
Equipment Used Cliff Mock Prss Recorder & 2" Well Tester			Month / Year Dec 98	

WELL NAME AND NUMBER	WELL FILE NO.	DATE OF TEST	PROD. METHOD	CHOKE SIZE	TEST HOURS	DAILY ALLOW BBLs.	PRODUCED DURING TEST			GOR.
							WATER BBLs.	OIL BBLs.	GAS MCF	
Plumer-Lundquist #25-2	14775	12/2	Pump	----- Orif. Plate Size 0.250 inch	24	---	250	95.19	29.8	313.1 SCF/ STB

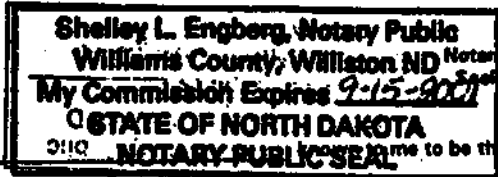
Name(s) of Person(s) Making Above Tests Ron Evitt	Name of Company or Operator Double EE Serv./Evitt Oper & Cons.
---	--

I certify that the above information is true and correct.

Signature 	Title Petroleum Engineer	Date 12/4/98
---------------	------------------------------------	------------------------

STATE OF North Dakota
 COUNTY OF Williams

On Dec 4th 19 98, Ron Evitt



executed the foregoing instrument, personally appeared before me and acknowledged that (s)he executed the same as a free act and deed.

Shelley L. Engberg
 Notary Public

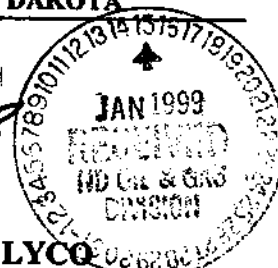
My Commission Expires Sept. 15, 2001



BEFORE THE INDUSTRIAL COMMISSION OF THE STATE OF NORTH DAKOTA

IN THE MATTER OF THE APPLICATION OF LYCO OPERATING COMPANY FOR AN ORDER OF THE COMMISSION (1) AMENDING THE FIELD RULES FOR THE BURG-SILURIAN POOL SO AS TO AUTHORIZE THE FLARING OF GAS FROM THE PLUMER - LUNDQUIST #25-2 WELL WITHOUT REGARD TO THE PRODUCTION RESTRICTIONS PROVIDED BY SECTION (12) OF COMMISSION ORDER NO. 8351, AND (2) AUTHORIZING THE FLARING OF GAS FROM THE PLUMER - LUNDQUIST #25-2 WELL AS AN EXCEPTION TO THE PROVISIONS OF SECTION 38-08-06.4 OF THE NORTH DAKOTA CENTURY CODE, AND/OR SUCH OTHER AND FURTHER RELIEF AS THE COMMISSION DEEMS APPROPRIATE

7217
CASE NO. 7218



APPLICATION OF LYCO OPERATING COMPANY FOR AN ORDER AUTHORIZING THE FLARING OF GAS

COMES NOW the applicant, LYCO OPERATING COMPANY ("Lyco"), 6688 North Central Expressway, Suite 1600, Dallas, Texas 75206-3927, and respectfully states as follows:

1.

That Lyco is the operator of the Plumer - Lundquist #25-2 well, the spacing unit for which was established by Commission Order No. 8351 as comprised of the SE/4 of Section 24, and the NE/4 of Section 25, in Township 161 North, Range 99 West, 5th P.M., Divide County, North Dakota.

2.

The Plumer - Lundquist #25-2 well is located within the boundaries of the Burg - Silurian Pool, an oil reservoir, but small amounts of gas are produced in association with crude oil at the wellhead as a by-product of oil production.

3.

The Plumer - Lundquist #25-2 well is currently not connected to a gas gathering facility, and all casinghead gas being produced by said well and not being used for lease operations is being flared.

4.

Under current market conditions the surplus casinghead gas presently being produced by the Plumer - Lundquist #25-2 well and the estimated recoverable reserves from the well are insufficient to recoup the costs of installing and operating a gas gathering facility.

5.

If applicant's request is not granted, taxes and royalties must be paid on flared gas which will increase operating costs, raise the economic limit and cause premature abandonment of the well; or the well must be connected to a gas pipeline at an economic loss which would also result in premature abandonment; or flaring must cease at some future time and the well must be "capped," resulting in the loss of oil production and the loss of the benefits of that production by all owners of interests in said well and the State of North Dakota.

Applicant respectfully requests that evidence and testimony in support of the application be allowed to be submitted to the Commission through affidavit, and that the Commission take the matter under advisement based upon such testimony and evidence. Evidence regarding flaring was also presented by the Applicant in Case No. 7145, and Applicant therefore respectfully requests that such evidence and testimony be incorporated by reference into the Case to be established in connection with this application.

WHEREFORE, Lyco respectfully requests that this matter be set for hearing at the next regularly-scheduled session of the Commission on February 24, 1999, that the Commission make a determination that the requested flaring exception be in the best interests of conservation and the prevention of waste, and that thereafter the Commission enter its order granting the relief requested.

DATED this 14th day of January, 1999.

LYCO OPERATING COMPANY


CROWLEY, HAUGHEY, HANSON,
TOOLE & DIETRICH P.L.L.P.



By _____
JOHN R. LEE
Attorneys for Applicant
Lyco Operating Company
113 East Broadway, P.O. Box 1206
Williston, ND 58802-1206

STATE OF NORTH DAKOTA)
 :
COUNTY OF WILLIAMS)

JOHN R. LEE, being first duly sworn, deposes and states that he is the attorney for the applicant named herein, that he has read the foregoing application, knows the contents thereof, and that the same is true to the best of this affiant's knowledge, information and belief.



JOHN R. LEE

Subscribed and sworn to before me this 14th day of January, 1999.

ELLEN McCABE-Notary Public
Williams County, Williston, ND
My Commission Expires 6-28-2002
STATE OF NORTH DAKOTA
(SEAL) NOTARY PUBLIC SEAL

Ellen McCabe

Notary Public
Residing at _____
My commission expires _____

CROWLEY, HAUGHEY, HANSON, TOOLE & DIETRICH P.L.L.P.

ATTORNEYS AT LAW

113 EAST BROADWAY
P.O. BOX 1206

WILLISTON, ND 58802-1206
TELEPHONE (701) 572-2200

ARTHUR F. LANEY, JR.
MYLES J. THOMAS
GEORGE C. DALYMORE
DAVID L. JOHNSON
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January 14, 1999



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(1918-1997)

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Ms. Karlene Fine
Executive Director and Secretary
North Dakota Industrial Commission
600 East Boulevard Avenue, Dept. 405
Bismarck, North Dakota 58505-0840

Re: Application for Flaring Relief - Lyco Operating Company

Dear Ms. Fine:

Enclosed herewith for filing is an Application of Lyco Operating Company for hearing at the Commission's regularly-scheduled hearings on February 24, 1999. An affidavit in support of the application will be forwarded for filing and consideration by the Commission early next week.

Thank you for your assistance. If you have any questions, please feel free to contact the undersigned at your convenience.

Very truly yours,

JOHN R. LEE

Enclosures

cc: ~~Mr. James W. Hyink (w/encl.)~~
~~Mr. Lynn D. Helms (w/encl.)~~



OK

Notice of publication

NORTH DAKOTA INDUSTRIAL COMMISSION BISMARCK, NORTH DAKOTA

The State of North Dakota by its Industrial Commission hereby gives notice pursuant to law and the rules and regulations of said Commission promulgated thereunder of the following public hearing to be held at 9:00 a.m. on February 24, 1999, Holiday Inn, 605 East Broadway Renoir/Russell Room, Bismarck, North Dakota. For the purpose of this hearing, the Commission, any member thereof acting as Examiner, or an Examiner appointed by the Commission will receive testimony and exhibits.

ATTENTION PERSONS WITH DISABILITIES: If you plan to attend the hearing and will need special facilities or assistance relating to a disability, please contact the North Dakota Industrial Commission at 701-328-3722 by February 10, 1999.

STATE OF NORTH DAKOTA TO:
All named parties and persons having any right, title, interest, or claim in the following cases and notices to the public.

CASE NO. 7213: ON A MOTION OF THE COMMISSION TO CONSIDER THE PROPER SPACING FOR THE DEVELOPMENT OF THE DANVILLE-GUNTON POOL, DIVIDE COUNTY, NORTH DAKOTA, REDEFINE THE LIMITS OF THE FIELD, AND ENACT SUCH SPECIAL FIELD RULES AS MAY BE NECESSARY. BASIC EARTH SCIENCE SYSTEMS, INC.

CASE NO. 7215: ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF JORDAN EXPLORATION COMPANY, L.L.C. FOR AN ORDER ALLOWING A WELL TO BE DRILLED AT A

LOCATION APPROXIMATELY 2140 FEET FROM THE EAST LINE AND 34 FEET FROM THE SOUTH LINE OF SECTION 9, T.162N., R.96W., DIVIDE COUNTY, NORTH DAKOTA, AS AN EXCEPTION TO THE APPLICABLE STATEWIDE WELL LOCATION RULES.

CASE NO. 7217: ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF LYCO OPERATING COMPANY FOR AN ORDER AMENDING THE FIELD RULES FOR THE BURG-SILURIAN POOL SO AS TO AUTHORIZE THE FLARING OF GAS FROM THE PLUMER-LUNDQUIST #25-2 WELL, LOCATED IN THE NW/4 NE/4 OF SECTION 25, T.161N., R.99W, DIVIDE COUNTY, NORTH DAKOTA, WITHOUT REGARD TO THE PRODUCTION RESTRICTIONS PROVIDED BY PARAGRAPH 12 OF COMMISSION ORDER NO. 8351.

CASE NO. 7218: ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF LYCO OPERATING COMPANY FOR AN ORDER PURSUANT TO SECTION 43-02-03-88.1 OF THE NORTH DAKOTA ADMINISTRATIVE CODE EXEMPTING THE PLUMER-LUNDQUIST #25-2 WELL, LOCATED IN NW/4 NE/4 OF SECTION 25, T.161N., R.99W, DIVIDE COUNTY, NORTH DAKOTA, FROM THE PROVISIONS OF SECTION 38-08-06.4 OF THE NORTH DAKOTA CENTURY CODE, RELATING TO THE FLARING OF GAS.

Signed by Edward T. Schafer, Governor Chairman, ND Industrial Commission

Affidavit of Publication

State of North Dakota, County of Divide, ss:

I, Steven J. Andrist, being first duly sworn, on my oath, say that I am the publisher of The Journal, a weekly newspaper of general circulation and official newspaper of Divide County, State of North Dakota, published in the city of Crosby, ND, and that the advertisement headed

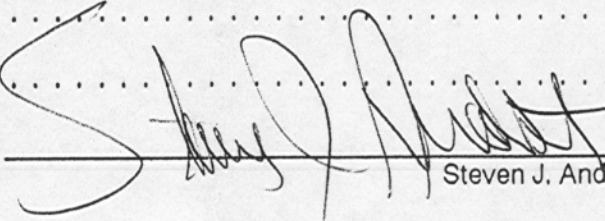
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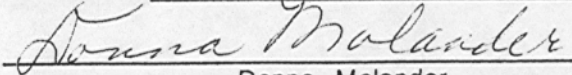
_____	Lines @ _____	= \$ _____
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February 3, 1999	14½ Column Inches @ 4.00	= \$ 58.00
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Total Charge \$ 58.00

Signed  Steven J. Andrist, Publisher

Subscribed and sworn to before me February 4, 1999


Donna Molander
Notary Public, State of North Dakota
My Commission Expires December 14, 2000

P.O. BOX 5516
BISMARCK, NORTH DAKOTA 58506-5516

**NOTICE OF PUBLICATION
NORTH DAKOTA
INDUSTRIAL COMMISSION
BISMARCK, NORTH DAKOTA**

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STATE OF NORTH DAKOTA TO:

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Signed by,
Edward T. Schafer, Governor
Chairman, ND Industrial Commission
2/4 - 33819

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BE NECESSARY. BASIC EARTH SCIENCE SYSTEMS, INC. CASE NO 7214: ON A MOTION OF THE COMMISSION TO CONSIDER THE PROPER SPACING FOR THE DEVELOPMENT OF THE SIOUX-STONEWALL POOL, MCKENZIE COUNTY, NORTH DAKOTA, REDEFINE THE LIMITS OF THE FIELD, AND ENACT SUCH SPECIAL FIELD RULES AS MAY BE NECESSARY. EXXON COMPANY, U.S.A. CASE NO 7215: ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF JORDAN EXPLORATION COMPANY, L.L.C. FOR AN ORDER ALLOWING A WELL TO BE DRILLED AT A LOCATION APPROXIMATELY 2140 FEET FROM THE EAST LINE AND 34 FEET FROM THE SOUTH LINE OF SECTION 9, T.162N., R.96W., DIVIDE COUNTY, NORTH DAKOTA, AS AN EXCEPTION TO THE APPLICABLE STATEWIDE WELL LOCATION RULES. CASE NO. 7205: (CONTINUED) ON A MOTION OF THE COMMISSION TO CONSIDER THE PROPER SPACING FOR THE DEVELOPMENT OF THE HARDCRABBLE-STONEWALL POOL, WILLIAMS COUNTY, NORTH DAKOTA, REDEFINE THE LIMITS OF THE FIELD, AND ENACT SUCH SPECIAL FIELD RULES AS MAY BE NECESSARY. PANTERRA PETROLEUM. CASE NO. 7216: ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF PANTERRA PETROLEUM FOR AN ORDER AMENDING THE PROVISIONS OF ORDER NO. 7935, RELATING TO THE COMINGLING OF HYDROCARBONS FROM THE HARDCRABBLE-RED RIVER POOL AND THE HARDCRABBLE-STONEWALL POOL IN THE WELL BORE OF THE SKURDAL #6-24 WELL, LOCATED IN THE SW/4 SE/4 OF SECTION 24, T.153N., R.102W., WILLIAMS COUNTY, NORTH DAKOTA, OR FOR SUCH OTHER AND FURTHER RELIEF AS THE COMMISSION DEEMS APPROPRIATE. CASE NO. 7217: ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF LYCO OPERATING COMPANY FOR AN ORDER AMENDING THE FIELD RULES FOR THE BURG-SILURIAN POOL SO AS TO AUTHORIZE THE FLARING OF GAS FROM THE PLUMER-LUNDQUIST #25-2 WELL, LOCATED IN THE NW/4 NE/4 OF SECTION 25, T.161N., R.99W., DIVIDE COUNTY, NORTH DAKOTA, WITHOUT REGARD TO THE PRODUCTION RESTRICTIONS PROVIDED BY PARAGRAPH 12 OF COMMISSION ORDER NO. 8351. CASE NO. 7218: ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF LYCO OPERATING COMPANY FOR AN ORDER PURSUANT TO SECTION 43-02-03-88.1 OF THE NORTH DAKOTA ADMINISTRATIVE CODE EXEMPTING THE PLUMER-LUNDQUIST #25-2 WELL, LOCATED IN NW/4 NE/4 OF SECTION 25, T.161N., R.99W., DIVIDE COUNTY, NORTH DAKOTA, FROM THE PROVISIONS OF SECTION 38-08-06.4 OF THE NORTH DAKOTA CENTURY CODE, RELATING TO THE FLARING OF GAS.

DESCRIPTION - OTHER COMMENTS/CHARGES	15 16	SAU SIZE BILLED UNITS	17 18	TIMES RUN RATE	19	GROSS AMOUNT	20	NET AMOUNT
ICEOPUBL BS CODE - 0001		109L		.59	1	64.31		64.31

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AFFIDAVIT OF PUBLICATION
STATE OF NORTH DAKOTA } ss
County of Burleigh

BEFORE ME, A NOTARY PUBLIC FOR THE STATE OF NORTH DAKOTA, PERSONALLY APPEARED Kirsten WHO, PERSON DULY SWORN, DEPOSES AND SAYS THAT HE(SHE) IS THE CLERK OF THE BISMARCK TRIBUNE COMPANY, AND THAT ABOVE PUBLICATIONS ~~WAS~~ Notice of WERE MADE THROUGH THE AFORESAID NEWSPAPER ON THE DATES SHOWN 2/4 SIGNED Kirsten WHO SWORN AND SUBSCRIBED TO BEFORE ME THIS 8 DAY OF February 1999

Notary Public in and for the State of North Dakota, Residing at Bismarck

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		TOTAL AMOUNT DUE	
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