WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

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

APPLICATION FOR CLASSIFICATION
AS HARDSHIP GAS WELL

JACK A. COLE
HUGH WASH FEDERAL NO. 1
UNIT J, SECTION 23-T27N-R13W
San Juan County, New Mexico

November 22, 1985

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

WALSH ENGINEERING & PRODUCTION CORP.

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December 2, 1985

Mr. Richard L. Stamets
Director
New Mexico Energy & Minerals
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

REF: Application for Hardship
Gas Well Classification
Jack A. Cole
Hugh Wash Federal No. 1
Unit J, Section 23-T27N-R13W
San Juan County, New Mexico

Dear Mr. Stamets:

As per Mr. Frank Chavez's request the following information is presented:

1. It is estimated that without relief, by approval of Hardship Gas Well Classification, that the well could only be economically produced approximately one additional year. The basis of this estimate is due to the amount of time the well is shut in by the gas purchasing company.

2. In addition, without relief, the investment, to allow steady production of approximately $37,500.00 for pumping equipment will never be paid out and could cause premature abandonment and loss of additional recoverable reserves. These reserves could be recovered by the well being classified as a Hardship Gas Well.

If you have any further questions, please do not hesitate to call upon me.

Very truly yours,

Ewell N. Walsh, P.E.
President

RECEIVED
DEC 03 1985
OIL CON. DIV.
DIST. 3

ENW:rr
cc: Frank Chavez, OCD, Aztec, N.M.
Jack A. Cole

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, New Mexico 87501

Adopted 3-2-84
Side 1

APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELL

Operator JACK A. COLE Contact Party Ewell N. Walsh

Address P. O. Box 191 Farmington, N.M. 87499 Phone No. 505 327-4892

Lease Hugh Wash Federal Well No. 1 UT J Sec. 23 TWP 27N RGE 13W

Pool Name Basin Dakota Minimum Rate Requested 50 MCFPD

Transporter Name El Paso Natural Gas Company Purchaser (if different) Northwest Pipeline

Are you seeking emergency "hardship" classification for this well? X yes ____ no

Applicant must provide the following information to support his contention that the subject well qualifies as a hardship gas well.

1) Provide a statement of the problem that leads the applicant to believe that "underground waste" will occur if the subject well is shut-in or is curtailed below its ability to produce. (The definition of underground waste is shown on the reverse side of this form)

2) Document that you as applicant have done all you reasonably and economically can do to eliminate or prevent the problem(s) leading to this application.

   a) Well history. Explain fully all attempts made to rectify the problem. If no attempts have been made, explain reasons for failure to do so.

   b) Mechanical condition of the well(provide wellbore sketch). Explain fully mechanical attempts to rectify the problem, including but not limited to: water influx from formation

      i) the use of "smallbore" tubing; ii) other de-watering devices, such as plunger lift, rod pumping units, etc.

3) Present historical data which demonstrates conditions that can lead to waste. Such data should include:

   a) Permanent loss of productivity after shut-in periods (i.e., formation damage). E-?

   b) Frequency of swabbing required after the well is shut-in or curtailed. N/A

   c) Length of time swabbing is required to return well to production after being shut-in. N/A

   d) Actual cost figures showing inability to continue operations without special relief Needed

4) If failure to obtain a hardship gas well classification would result in premature abandonment, calculate the quantity of gas reserves which would be lost When abandoned project

5) Show the minimum sustainable producing rate of the subject well. This rate can be determined by:

   a) Minimum flow or "log off" test; and/or NA

   b) Documentation of well production history (producing rates and pressures, as well as gas/water ratio, both before and after shut-in periods due to the well dying, and other appropriate production data). Needed

6) Attach a plat and/or map showing the proration unit dedicated to the well and the ownership of all offsetting acreage.

7) Submit any other appropriate data which will support the need for a hardship classification.

8) If the well is in a prorated pool, please show its current under- or over-produced status.

9) Attach a signed statement certifying that all information submitted with this application is true and correct to the best of your knowledge; that one copy of the application has been submitted to the appropriate Division district office (give the name) and that notice of the application has been given to the transporter/purchaser and all offset operators.

GENERAL INFORMATION APPLICABLE TO HARDSHIP GAS WELL CLASSIFICATION

1. Definition of Underground Waste.

"Underground Waste as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recovered from any pool, and the use of inefficient underground storage of natural gas."

2) The only acceptable basis for obtaining a "hardship" classification is prevention of waste with the burden of proof solely on the applicant. The applicant must not only prove waste will occur without the "hardship" classification, but also that he has acted in a responsible and prudent manner to minimize or eliminate the problem prior to requesting this special consideration. If the subject well is classified as a "hardship" well, it will be permitted to produce at a specified minimum sustainable rate without being subject to shut-in by the purchaser due to low demand. The Division can rescind approval at any time without notice and require the operator to show cause why the classification should not be permanently rescinded if abuse of this special classification becomes apparent.

3) The minimum rate will be the minimum sustainable rate at which the well will flow. If data from historical production is insufficient to support this rate (in the opinion of the Director), or if an offset operator or purchaser objects to the requested rate, a minimum flow ("log off") test may be required. The operator may, if he desires, conduct the minimum flow test, and submit this information with his application.

4) If a minimum flow test is to be run, either at the operator's option or at the request of the Division, the offset operators, any protesting party, the purchaser and OCD will be notified of the date of the test and given the opportunity to witness, if they so desire.

5) Any interested party may review the data submitted at either the Santa Fe office or the appropriate OCD District Office.

6) The Director can approve uncontested applications administratively if, in his opinion, sufficient justification is furnished. Notice shall be given of intent to approve by attaching such notice to the regular examiner's hearing docket. Within 20 days following the date of such hearing, the affected parties will be permitted to file an objection. If no objection has been filed, the application may be approved.

7) Should a protest be filed in writing, the applicant will be permitted to either withdraw the application, or request it to be set for hearing.

8) An emergency approval, on a temporary basis for a period not to exceed 90 days, may be granted by the District Supervisor, pending filing of formal application and final action of the OCD Director. This temporary approval may be granted only if the District Supervisor is convinced waste will occur without immediate relief. If granted, the District Supervisor will notify the purchaser.

9) After a well receives a "hardship" classification, it will be retained for a period of one year unless rescinded sooner by the Division. The applicant will be required to certify annually that conditions have not changed substantially in order to continue to retain this classification.

10) Nothing here withstanding, the Division may, on its own motion, require any and all operators to show cause why approval(s) should not be rescinded if abuse is suspected or market conditions substantially change in the State of New Mexico.

11) A well classified as a "hardship well" will continue to accumulate over and under production (prorated pools). Should allowables exceed the hardship allowable assigned, the well will be permitted to produce at the higher rate, if capable of doing so, and would be treated as any other non-hardship well. Any cumulative overproduction accrued either before or after being classified "hardship" must, however, be balanced before the well can be allowed to produce at the higher rate.

SUPPLEMENT TO APPLICATION FOR
CLASSIFICATION AS HARDSHIP GAS WELL

JACK A. COLE
HUGH WASH FEDERAL NO. 1
UNIT J, SECTION 23-T27N-R13W
San Juan County, New Mexico

1. The well is currently producing water in sufficient quantities that affects gas producing conditions. Extended shut in periods at this time will affect the volume of gas that could ultimately be recovered from the well or reservoir.

   During shut in periods the produced water will enter the permeability and porosity, of the formation, creating a block and will prevent the gas in the porosity from flowing to the wellbore. Preventing the gas from flowing to the wellbore would cause "underground waste". The volume of gas that could be ultimately produced would be decreased.

   The decrease of flow of gas, due to blocking of the permeability, could affect the economics of continued production of the well and cause the early plugging and abandonment of the well. Due to an early abandonment "underground waste" would occur because of gas remaining in the reservoir would not be produced

2. (a) A. Well commenced producing in June 1984.
   B. Almost immediately water production affected the ability of the well to produce gas.
   C. An intermitter, stop cock operation, was installed in June 1984.
   D. The utilization of a piston, or plunger lift, was considered, however, due to low volume of gas being produced and depth of well, the utilization of a piston was considered to not be effective.
   E. A subsurface pump, sucker rods and pumping unit were installed in December 1984 to remove produced water and allow the well to produce a more continual flow of gas.

2. (b) See Exhibit No. 1 for wellbore sketch.

   1. See 2(a) for mechanical attempts to rectify problem of produced water.

      The installation of subsurface pump, sucker rods and pumping unit should be considered to be the ultimate, and most costly, method to remove produced water from a gas well.

3. See Exhibit No. 2, Production Data, and Exhibit No. 3, Production Decline Curve for historical production data.

3. (a) During shut in periods the produced water will enter the permeability and porosity, of the formation, creating a block and will prevent the gas in the porosity from flowing to the wellbore. Preventing the gas from flowing to the wellbore would cause "underground waste". The volume of gas that could be ultimately produced would be decreased.

The decrease of flow of gas, due to blocking of the permeability, could affect the economics of continued production of the well and cause the early plugging and abandonment of the well. Due to an early abandonment "underground waste" would occur because of gas remaining in the reservoir would not be produced.

3. (b) No swabbing of well was necessary, however, if pumping equipment had not been installed the well would probably have to be swabbed to remove water to allow gas to be produced.

3. (c) No swabbing required.

3. (d) Pumping equipment was installed on well at a cost of approximately $37,500.00.

Pumping equipment was installed to remove produced water, at considerable cost, and prevent damage to reservoir.

4. As previously stated in Item No. 1, formage damage due to produced water blocking permeability and decreasing gas flow, could result in premature abandonment.

Failure to obtain a hardship gas well classification could result in premature abandonment.

Exhibit No. 4 - Estimated Gas Reserves Produced Without Hardship Gas Well Classification.

Exhibit No. 5 - Estimated Gas Reserves Produced with Hardship Gas Well Classification.

Estimated Gas Reserves Produced with Hardship Gas Well Classification	158,276 MCF
Estimated Gas Reserves Produced without Hardship Gas Well Classification	84,933 MCF
Estimated Reserves not Produced	73,343 MCF

5. (a) No minimum flow or "log off" test was required due to necessity of having pumping equipment to remove produced water.

5. (b) For documentation of well production history see Exhibit No. 2 and Exhibit No. 3.

6. Exhibit No. 6 is a plat indicating the proration unit dedicated to the well and the ownership of offsetting acreage.

7. Exhibit No. 7. Affect on production due to shut in by gas purchaser.

8. Exhibit No. 8 indicates the current under-or over produced status in the prorated Basin Dakota Gas Pool.

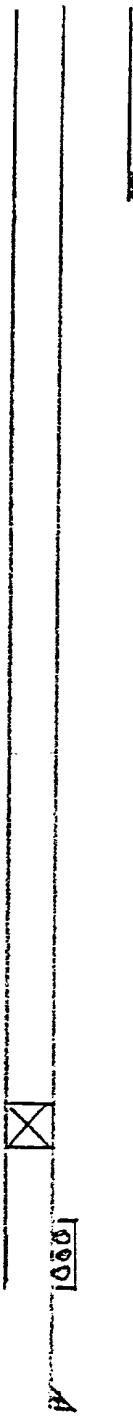
It may be noted that the well, as of November 1985, has an over produced status. The over produced status is due to penalty for filing a late Deliverability Test for 1984.

The over produced status would not have occurred if the test was properly filed on time. The producing capacity of the well would in all probability not cause such a status under normal conditions.

EXHIBIT NO. 1

JACK A. COLE
HUGH WASH FEDERAL NO. 1

WELLBORE SKETCH



8-5/8" casing set at 264'
Cemented to surface.

Tubing Anchor - catcher at 5600'

Perforations 5868'-5872'; 5899'-5904'; 5918'-5921' and 5924'-5944'
1 shot per foot

4-1/2" casing set at 5988'
Cemented to surface in 3 stages

EXHIBIT NO. 2

WALSH
ENGINEERING AND PRODUCTION CORPORATION
PRODUCTION DATA

FIELD BASIN DAKOTA OPERATOR JACK A. COLE
COUNTY SJ STATE NM LEASE HUGH WASH FED
UNIT J SECTION 23 TWN 27N RNG 13W WELL NO. 1

FLOW/PMP-->PUMPING YEAR 1984 IF OIL WELL,1--->

MON. MONTH	DAYS PROD	TOTAL WATER & BS&W-Bbls. MONTHLY	TOTAL WATER & BS&W-Bbls. CUM.	DA AV	TOTAL OIL BARRELS MONTHLY	TOTAL OIL BARRELS CUM.	DA AV	TOTAL GAS MCF MONTHLY	TOTAL GAS MCF CUM.	DA. AVE.	G.O.R CU.-FT Per Bb.
PREV.A1..L60											
JAN			0	0		0	0		0	0	0
FEB			0	0		0	0		0	0	0
MAR			0	0		0	0		0	0	0
APR			0	0		0	0		0	0	0
MAY			0	0		0	0		0	0	0
JUN	28	112	112	4		0	0	2,840	2,840	101	0
JUL	31	124	236	4		0	0	1,593	4,433	51	0
AUG	29	116	352	4		0	0	2,147	6,580	74	0
SEP	0	0	352	0		0	0	0	6,580	0	0
OCT	4	16	368	4		0	0	267	6,847	67	0
NOV	15	60	428	4		0	0	896	7,743	60	0
DEC	31	124	552	4		0	0	2,016	9,759	65	0
TOTAL	138	552		4	0		0	9,759		71	0
YEAR 1985											
JAN	31	124	676	4		0	0	1,116	10,875	36	0
FEB	20	80	756	4		0	0	697	11,572	35	0
MAR	1	2	758	2		0	0	60	11,632	60	0
APR	12	48	806	4		0	0	459	12,091	38	0
MAY	31	124	930	4		0	0	931	13,022	30	0
JUN	17	68	998	4		0	0	621	13,643	37	0
JUL	31	124	1,122	4		0	0	1,396	15,039	45	0
AUG	31	124	1,246	4		0	0	1,250	16,289	40	0
SEP	8	32	1,278	4		0	0	277	16,566	35	0
OCT	0	0	1,278	0		0	0	0	16,566	0	0
NOV			1,278	0		0	0		16,566	0	0
DEC			1,278	0		0	0		16,566	0	0
TOTAL	182	726		4	0		0	6,807		37	0
YEAR											
JAN			1,278	0		0	0		16,566	0	0
FEB			1,278	0		0	0		16,566	0	0
MAR			1,278	0		0	0		16,566	0	0
APR			1,278	0		0	0		16,566	0	0
MAY			1,278	0		0	0		16,566	0	0
JUN			1,278	0		0	0		16,566	0	0
JUL			1,278	0		0	0		16,566	0	0
AUG			1,278	0		0	0		16,566	0	0
SEP			1,278	0		0	0		16,566	0	0
OCT			1,278	0		0	0		16,566	0	0
NOV			1,278	0		0	0		16,566	0	0
DEC			1,278	0		0	0		16,566	0	0
TOTAL	0	0		0	0		0	0		0	0

Memo

From

To

June 1984 - FEB 1985

$y = 2.26x + 35.8$

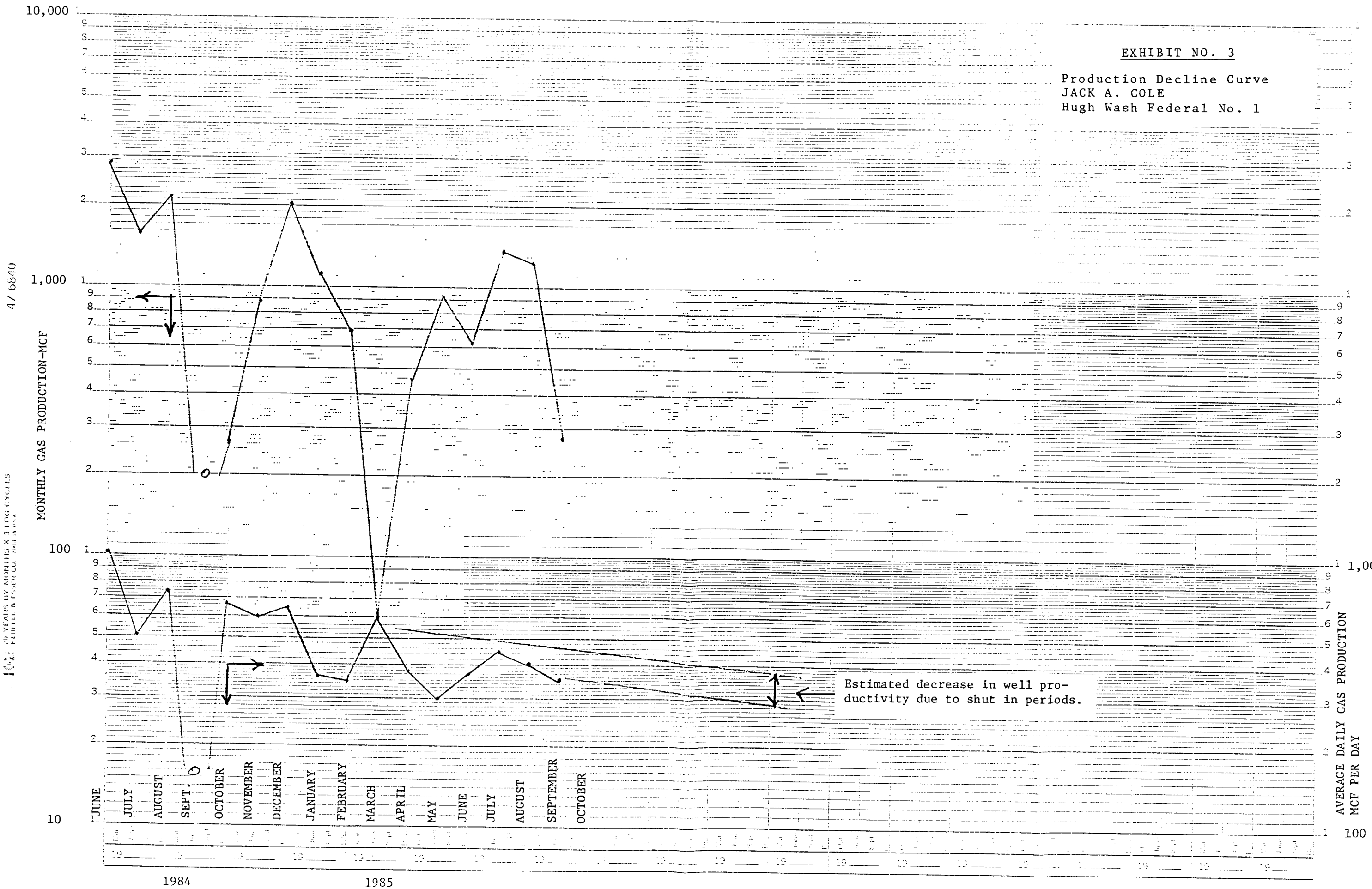
April '85 - Sept. '85

$y = 5.94x + 16.5$

Oil Conservation **Aztec, New Mexico**

EXHIBIT NO. 3

Production Decline Curve
JACK A. COLE
Hugh Wash Federal No. 1



JACK A. COLE
PRODUCTION RATE FORECAST AND EVALUATION
HARDSHIP GAS WELL CLASSIFICATION

11/22/85
14:50

YEAR	WELL CNT	GROSS PRODUCTION BBL OIL	GROSS PRODUCTION MCF GAS	NET PRODUCTION BBL OIL	NET PRODUCTION MCF GAS	PRICE OIL	PRICE GAS	SALES INCOME OIL $	SALES INCOME GAS $	SALES INCOME TOTAL $
1985	1	0	1,571	0	1,178	0.00	3.000	0	3,534	3,534
1986	1	0	8,303	0	6,227	0.00	3.000	0	18,681	18,681
1987	1	0	7,168	0	5,376	0.00	3.000	0	16,127	16,127
1988	1	0	6,680	0	5,010	0.00	3.000	0	15,031	15,031
1989	1	0	6,346	0	4,760	0.00	3.000	0	14,279	14,279
1990	1	0	6,029	0	4,522	0.00	3.000	0	13,565	13,565
1991	1	0	5,728	0	4,296	0.00	3.000	0	12,887	12,887
1992	1	0	5,441	0	4,081	0.00	3.000	0	12,243	12,243
1993	1	0	5,169	0	3,877	0.00	3.000	0	11,631	11,631
1994	1	0	4,911	0	3,683	0.00	3.000	0	11,049	11,049
1995	1	0	4,665	0	3,499	0.00	3.000	0	10,497	10,497
1996	1	0	4,432	0	3,324	0.00	3.000	0	9,972	9,972
1997	1	0	4,210	0	3,158	0.00	3.000	0	9,473	9,473
1998	1	0	4,000	0	3,000	0.00	3.000	0	8,999	8,999
1999	1	0	3,800	0	2,850	0.00	3.000	0	8,550	8,550
2001	1	0	6,480	0	4,860	0.00	3.000	0	14,579	14,579
TOT		0	84,933	0	63,701	0.00	3.000	0	191,097	191,097

YEAR	EXPENSES TAXES	EXPENSES WFP-TAX	EXPENSES OPER	EXPENSES TOTAL	NET OPER INCOME	OTHER COSTS	NET CASH FLOW ANNUAL	NET CASH FLOW CUMULATIVE	NET CASH FLOW 13.00 PCNT DISCOUNTED	NET CASH FLOW DISCOUNTED
1985	293	0	701	994	2,540	0	2,540	2,540	2,501	2,501
1986	1,551	0	4,278	5,829	12,852	0	12,852	15,392	11,829	14,330
1987	1,339	0	4,407	5,746	10,381	0	10,382	25,774	8,444	22,774
1988	1,248	0	4,539	5,787	9,244	0	9,244	35,018	6,649	29,423
1989	1,185	0	4,675	5,860	8,419	0	8,419	43,437	5,359	34,782
1990	1,126	0	4,815	5,941	7,624	0	7,624	51,061	4,295	39,077
1991	1,070	0	4,960	6,030	6,857	0	6,857	57,918	3,419	42,496
1992	1,016	0	5,109	6,125	6,118	0	6,118	64,036	2,700	45,196
1993	965	0	5,262	6,227	5,404	0	5,403	69,439	2,110	47,306
1994	917	0	5,420	6,337	4,712	0	4,712	74,151	1,629	48,935
1995	871	0	5,582	6,453	4,044	0	4,043	78,194	1,237	50,172
1996	828	0	5,750	6,578	3,394	0	3,394	81,588	919	51,091
1997	786	0	5,922	6,708	2,765	0	2,764	84,352	663	51,754
1998	747	0	6,100	6,847	2,152	0	2,152	86,504	457	52,211
1999	710	0	6,283	6,993	1,557	0	1,557	88,061	293	52,504
2001	1,210	0	12,013	13,223	1,356	0	1,357	89,418	220	52,724
TOT	15,862	0	85,816	101,678	89,419	0	89,418	89,418	52,724	52,724

PRESENT WORTH PROFILE

PCNT DSCNT	$ VALUE
0.00	89,418
10.00	58,334
15.00	49,555
20.00	43,135
25.00	38,277
30.00	34,496

	OIL (BBL)	GAS (MCF)
ULTIMATE GROSS	0	101,499
CUM PROD GROSS	0	16,566
FUTURE RES GROSS	0	84,933
FUTURE RES NET	0	63,701
GROSS WELL COUNT	0.000	1.000
NET WELL COUNT	0.000	1.000

YR MO	WORKINT	OIL REV INT	GAS REV INT
85 11	1.00000	0.750000	0.750000
	1.00000	0.807692	0.807692

WALSH ENGINEERING & PRODUCTION CORPORATION

EFFECTIVE DATE: NOVEMBER 1, 1985
LEASE ID: 39
LEASE NAME: HUGH WASH
WELL NAME: NO. 1
STATE: NEW MEXICO
COUNTY: SAN JUAN
FIELD: BASIN DAKOTA
OPERATOR: JACK A. COLE
RESRV CATG: 111

EXHIBIT NO. 4

JACK A. COLE
PRODUCTION RATE FORECAST AND EVALUATION
HARDSHIP GAS WELL CLASSIFICATION

11/22/85
14:29

YEAR	WELL CNT	GROSS PRODUCTION BBL OIL	GROSS PRODUCTION MCF GAS	NET PRODUCTION BBL OIL	NET PRODUCTION MCF GAS	PRICE OIL	PRICE GAS	SALES INCOME OIL $	SALES INCOME GAS $	SALES INCOME TOTAL $
1985	1	0	2,454	0	1,841	0.00	3.000	0	5,522	5,522
1986	1	0	12,973	0	9,730	0.00	3.000	0	29,189	29,189
1987	1	0	11,199	0	8,399	0.00	3.000	0	25,198	25,198
1988	1	0	10,438	0	7,829	0.00	3.000	0	23,486	23,486
1989	1	0	9,916	0	7,437	0.00	3.000	0	22,311	22,311
1990	1	0	9,420	0	7,065	0.00	3.000	0	21,196	21,196
1991	1	0	8,949	0	6,712	0.00	3.000	0	20,136	20,136
1992	1	0	8,502	0	6,376	0.00	3.000	0	19,129	19,129
1993	1	0	8,077	0	6,058	0.00	3.000	0	18,173	18,173
1994	1	0	7,673	0	5,755	0.00	3.000	0	17,264	17,264
1995	1	0	7,289	0	5,467	0.00	3.000	0	16,401	16,401
1996	1	0	6,925	0	5,194	0.00	3.000	0	15,581	15,581
1997	1	0	6,579	0	4,934	0.00	3.000	0	14,802	14,802
1998	1	0	6,250	0	4,687	0.00	3.000	0	14,062	14,062
1999	1	0	5,937	0	4,453	0.00	3.000	0	13,359	13,359
2007	1	0	35,695	0	26,771	0.00	3.000	0	80,314	80,314
TOT		0	158,276	0	118,708	0.00	3.000	0	356,123	356,123

YEAR	EXPENSES TAXES	EXPENSES WEP-TAX	EXPENSES OPER	EXPENSES TOTAL	NET OPER INCOME	OTHER COSTS	NET CASH FLOW ANNUAL	NET CASH FLOW CUMULATIVE	NET CASH FLOW 13.00 PCNT DISCOUNTED	NET CASH FLOW DISCOUNTED
1985	458	0	701	1,159	4,363	0	4,363	4,363	4,297	4,297
1986	2,423	0	4,278	6,701	22,488	0	22,488	26,851	20,690	24,987
1987	2,091	0	4,407	6,498	18,700	0	18,700	45,551	15,206	40,193
1988	1,949	0	4,539	6,488	16,998	0	16,997	62,548	12,224	52,417
1989	1,852	0	4,675	6,527	15,784	0	15,784	78,332	10,046	62,463
1990	1,759	0	4,815	6,574	14,622	0	14,621	92,953	8,235	70,698
1991	1,671	0	4,960	6,631	13,505	0	13,505	106,458	6,732	77,430
1992	1,588	0	5,109	6,697	12,432	0	12,433	118,891	5,485	82,915
1993	1,508	0	5,262	6,770	11,403	0	11,402	130,293	4,451	87,366
1994	1,433	0	5,420	6,853	10,411	0	10,411	140,704	3,597	90,963
1995	1,361	0	5,582	6,943	9,458	0	9,457	150,161	2,892	93,855
1996	1,293	0	5,750	7,043	8,538	0	8,538	158,699	2,310	96,165
1997	1,229	0	5,922	7,151	7,651	0	7,651	166,350	1,832	97,997
1998	1,167	0	6,100	7,267	6,795	0	6,794	173,144	1,440	99,437
1999	1,109	0	6,283	7,392	5,967	0	5,967	179,111	1,119	100,556
2007	3,666	0	52,876	59,542	20,772	0	20,771	199,882	2,748	103,304
TOT	29,557	0	126,679	156,236	199,887	0	199,882	199,882	103,304	103,304

PRESENT WORTH PROFILE

PCNT DSCNT	$ VALUE
0.00	199,882
10.00	116,570
15.00	96,048
20.00	81,859
25.00	71,564
30.00	63,796

	OIL (BBL)	GAS (MCF)
ULTIMATE GROSS	0	174,842
CUM PROD GROSS	0	16,566
FUTURE RES GROSS	0	158,276
FUTURE RES NET	0	118,708
GROSS WELL COUNT	0.000	1.000
NET WELL COUNT	0.000	1.000

YR MO	WORKINT	OIL REV INT	GAS REV INT
85 11	1.00000	0.750000	0.750000
	1.00000	0.807692	0.807692

WALSH ENGINEERING & PRODUCTION CORPORATION

EFFECTIVE DATE: NOVEMBER 1, 1985
LEASE ID: 38
LEASE NAME: HUGH WASH
WELL NAME: NO. 1
STATE: NEW MEXICO
COUNTY: SAN JUAN
FIELD: BASIN DAKOTA
OPERATOR: JACK A. COLE
RESRV CATG: 111

EXHIBIT NO. 5

T27N-R13W

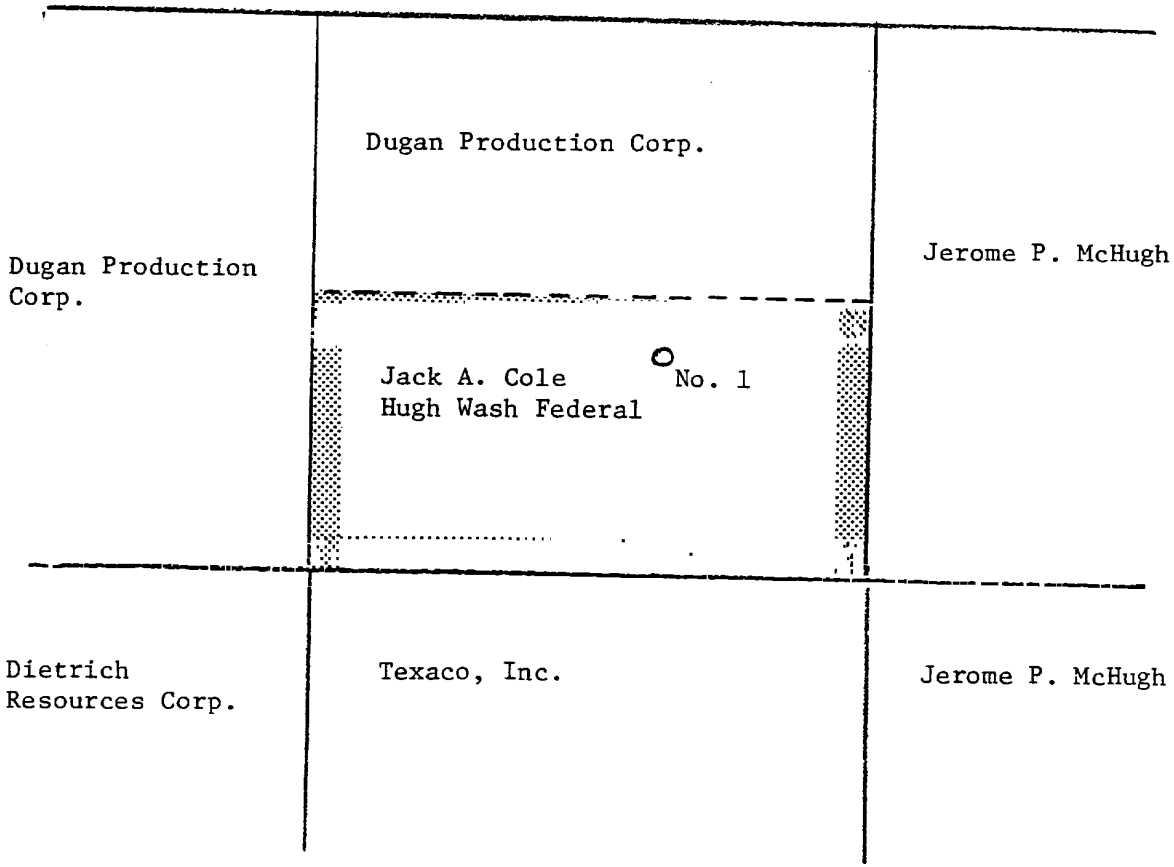


EXHIBIT NO. 6

JACK A. COLE
HUGH WASH FEDERAL NO. 1

OWNERSHIP OF OFFSETTING ACREAGE
AND PRORATION UNIT

EXHIBIT NO. 7

Curtailment, shut in by gas purchaser, has occurred for lengthly periods of time. The following are periods in which the purchaser required the well to be shut in although the producing capacity of the well was not extremely high.

YEAR	MONTH	DAYS SHUT IN
1985	February	8
	March	30
	April	18
	June	13
	September	22
	October	31

As indicated by the production decline curve, Exhibit No. 3, the producing capacity of the well, on a rate per producing day basis, after the shut in periods in February, March and April 1985, was considerably less than the producing capacity prior to the shut in periods in February, March and April 1985.

The decrease in producing capacity, in this case could occur due to formation damage.

State of New Mexico
Energy/Minerals Department

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

Gas Supplement Number: NW 1761

EXHIBIT NO. 8

Date November 4, 1985

NOTICE OF ASSIGNMENT OF ALLOWABLE TO A GAS WELL

The operator of the following well has complied with all the requirements of the Oil Conservation Division and the well is hereby assigned an allowable as shown below.

Date of Connection 5-31-84 Date of First Allowable ~~or Allowable Change~~ 8-2-85
Purchaser EPG Pool Basin Dakota
Operator Jack A. Cole Lease Hugh Wash Federal
Well No. 1 Unit Letter J Sec. 23 Twp. 27N Range 13W
Dedicated Acreage S/320 Revised Acreage _____ Difference _____
Acreage Factor 1.00 Revised Acreage Factor _____ Difference _____
Deliverability 85 Revised Deliverability _____ Difference _____
A x D Factor _____ Revised A x D Factor _____ Difference _____

New Connection Annual Test
Delinquent 1984 Test N

OCD District No. III

CALCULATION OF SUPPLEMENTAL ALLOWABLE

Previous Status Adjustments.....

MONTH	% OF MO.	PREV. ALLOW.	REV. ALLOW.	PREV. PROD.	REV. PROD.	REMARKS
April						
May						Penalty for late test from
June						5-31-84 to 8-2-85
July						
August						
September						
October						
November						
December						
January						
February						
March						
April						
May						
June						
July						
August			6857			
September			5908			
October			2083			
November			2453			
December						
January						
February						
March						
TOTALS			12765			

Allowable Production Difference.....	12765+
Nov. Schedule O/U Status.....	15213-
Revised Sept. O/U Status.....	2448-

Effective In Dec. Schedule
Current Classification NC To N

Note: All gas volumes are in MCF@15.025 psia.

R. L. Stamets, Division Director

By Richard L. Brown

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

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

November 22, 1985

CERTIFIED RETURN RECEIPT

Ray F. Dietrich, President
Dietrich Resources Corporation
410 - 17th Street
Suite 2450
Denver, Colorado 80202

REF: Application for Hardship
Gas Well Classification
Jack A. Cole
Hugh Wash Federal No. 1
Unit J, Section 23-T27N-R13W
San Juan County, New Mexico

Dear Mr. Dietrich:

Enclosed you will find a copy of the above-referred-to application.

Your advising Mr. Stamets of your approval, as soon as possible, of the application would be appreciated. Without your approval it will be necessary for the Oil Conservation Commission to wait twenty days (20) after date of hearing docket before an approval may be given. Although it has been requested that the application be approved administratively, it is still required to publish the application in a hearing docket.

Thank you for your cooperation and consideration in this matter.

Very truly yours,

ORIGINAL SIGNED BY
EWELL N. WALSH

Ewell N. Walsh, P.E.
President

ENW:rr
cc: R. L. Stamets, OCD, Santa Fe, N.M.
Frank Chavez, OCD, Aztec, N.M.
Jack A. Cole

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NOV 25 1985
OIL CON. DIV.
DIST. 3

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

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

November 22, 1985

CERTIFIED RETURN RECEIPT

Mr. Jerome P. McHugh, President
Jerome P. McHugh & Associates
c/o Nassau Resources, Inc.
650 South Cherry Street, Suite 1225
Denver, Colorado 80222

REF: Application for Hardship
Gas Well Classification
Jack A. Cole
Hugh Wash Federal No. 1
Unit J, Section 23-T27N-R13W
San Juan County, New Mexico

Dear Mr. McHugh:

Enclosed you will find a copy of the above-referred-to application.

Your advising Mr. Stamets of your approval, as soon as possible, of the application would be appreciated. Without your approval it will be necessary for the Oil Conservation Commission to wait twenty days (20) after date of hearing docket before an approval may be given. Although it has been requested that the application be approved administratively, it is still required to publish the application in a hearing docket.

Thank you for your cooperation and consideration in this matter.

Very truly yours,

ORIGINAL SIGNED BY
EWELL N. WALSH

Ewell N. Walsh, P.E.
President

ENW:rr
cc: R. L. Stamets, OCD, Santa Fe, N.M.
Frank Chavez, OCD, Aztec, N.M.
Jack A. Cole

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DIST. 3

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

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

November 22, 1985

EL PASO NATURAL GAS COMPANY
Attn: A. M. Derrick
Senior Vice President
P. O. Box 1492
El Paso, Texas 79978

REF: Application for Hardship
Gas Well Classification
Jack A. Cole
Hugh Wash Federal No. 1
Unit J, Section 23-T27N-R13W
San Juan County, New Mexico

Dear Mr. Derrick:

Enclosed you will find a copy of the above-referred-to application.

The copy of the application is being sent to you as per required by the New Mexico Oil Conservation Commission.

Very truly yours,

ORIGINAL SIGNED BY
EWELL N. WALSH

Ewell N. Walsh, P.E.
President

ENW:rr
cc: R. L. Stamets, OCD, Santa Fe, N.M.
Frank Chavez, OCD, Aztec, N.M.
Jack A. Cole

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

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

November 22, 1985

Northwest Pipeline Corporation
Attn: James R. Herbster
Vice President - Administration
295 Chipeta Way
Salt Lake City, Utah 84108

REF: Application for Hardship
Gas Well Classification
Jack A. Cole
Hugh Wash Federal No. 1
Unit J, Section 23-T27N-R13W
San Juan County, New Mexico

Dear Mr. Herbster:

Enclosed you will find a copy of the above-referred-to application.

The copy of the application is being sent to you as per required by the New Mexico Oil Conservation Commission.

Very truly yours,

ORIGINAL SIGNED BY
EWELL N. WALSH

Ewell N. Walsh, P.E.
President

ENW:rr
cc: R. L. Stamets, OCD, Santa Fe, N.M.
Frank Chavez, OCD, Aztec, N.M.
Jack A. Cole

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

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

November 22, 1985

Mr. R. L. Stamets
Director
New Mexico Energy & Minerals
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

REF: Application for Hardship
Gas Well Classification
Jack A. Cole
Hugh Wash Federal No. 1
Unit J, Section 23-T27N-R13W
San Juan County

Dear Mr. Stamets:

On behalf of Jack A. Cole, enclosed you will find three (3) copies of the above-referred-to application.

It is requested that consideration be given to administrative approval of the application as set forth in Rule 410, Processing of Applications for Hardship Gas Wells.

The reason for requesting administrative approval is due to the fact that a pumping unit is required to remove the produced water from the well to produce formation gas and prevent formation damage. In my opinion, the utilization of a pumping unit to remove water could be considered the ultimate means to remove produced water from a gas well.

The owners of the offsetting acreage are being notified of this application. Copies of letters to the owners of the offsetting acreage are enclosed with this letter.

Thank you for your consideration and cooperation in this matter.

Very truly yours,

ORIGINAL SIGNED BY
EWELL N. WALSH

Ewell N. Walsh, P.E.
President

RECEIVED
NOV 25 1985
OIL CON. DIV.
DIST. 3

ENW:rr
cc: Frank Chavez, NMOCD, Aztec, N.M.
Jack A. Cole
Dietrich Resources Corp., Ray F. Dietrich
Dugan Production Corp., Tom Dugan
Jerome P. McHugh & Associates
Texaco, Inc., John A. Schell
Northwest Pipeline Company, Salt Lake City, Utah
El Paso Natural Gas Company

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

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

November 22, 1985

CERTIFIED RETURN RECEIPT

Mr. John A. Schell, Manager of Operations
Texaco, Inc.
P. O. Box 2100
Denver, Colorado 80201

REF: Application for Hardship
Gas Well Classification
Jack A. Cole
Hugh Wash Federal No. 1
Unit J, Section 23-T27N-R13W
San Juan County, New Mexico

Dear Mr. Schell:

Enclosed you will find a copy of the above-referred-to application.

Your advising Mr. Stamets of your approval, as soon as possible, of the application would be appreciated. Without your approval it will be necessary for the Oil Conservation Commission to wait twenty days (20) after date of hearing docket before an approval may be given. Although it has been requested that the application be approved administratively, it is still required to publish the application in a hearing docket.

Thank you for your cooperation and consideration in this matter.

Very truly yours,

ORIGINAL SIGNED BY
EWELL N. WALSH

Ewell N. Walsh, P.E.
President

ENW:rr
cc: R. L. Stamets, OCD, Santa Fe, N.M.
Frank Chavez, OCD, Aztec, N.M.
Jack A. Cole

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OIL CON. DIV.
DIST. 3

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

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

November 22, 1985

CERTIFIED RETURN RECEIPT

Mr. Tom Dugan, President
Dugan Production Corporation
P. O. Box 208
Farmington, New Mexico 87499

REF: Application for Hardship
Gas Well Classification
Jack A. Cole
Hugh Wash Federal No. 1
Unit J, Section 23-T27N-R13W
San Juan County, New Mexico

Dear Mr. Dugan:

Enclosed you will find a copy of the above-referred-to application.

Your advising Mr. Stamets of your approval, as soon as possible, of the application would be appreciated. Without your approval it will be necessary for the Oil Conservation Commission to wait twenty days (20) after date of hearing docket before an approval may be given. Although it has been requested that the application be approved administratively, it is still required to publish the application in a hearing docket.

Thank you for your cooperation and consideration in this matter.

Very truly yours,

ORIGINAL SIGNED BY
EWELL N. WALSH

Ewell N. Walsh, P.E.
President

ENW:rr
cc: R. L. Stamets, OCD, Santa Fe, N.M.
Frank Chavez, OCD, Aztec, N.M.
Jack A. Cole

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NOV 25 1985
OIL CON. DIV.
DIST. 3

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

TONEY ANAYA
GOVERNOR

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

December 2, 1985

Mr. Jack A. Cole
c/o Ewell N. Walsh
P.O. Box 419
Farmington, NM 87499

Re: Hardship Application for
Hugh Wash Federal #1 J-23-27N-13W

Dear Red:

You are hereby granted emergency approval of a hardship gas well classification effective this date for a period of ninety (90) days to expire on March 2, 1986, as per Rule 411.

Sincerely,

Frank T. Chavez
District Supervisor

FTC/dj

xc: Mr. Richard Stamets, OCD Santa Fe
EPNG Co.
NPC
Well File

50 YEARS

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

1935 - 1985

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

ORDER HGW-1

THE APPLICATION OF JACK A. COLE

Administrative Order
Of The Oil Conservation Division

Under the provisions of Rules 408 and 409, Jack A. Cole made application to the Oil Conservation Division for Hardship Gas Well classification for its Hugh Wash Federal Well No. 1, located in Unit J of Section 23, Township 27 North, Range 13 West, NMPM, San Juan County, New Mexico in the Basin Dakota Pool.

The Division Director finds:

(1) That application has been duly filed under the provisions of Rule 409 of the Division's Rules and Regulations and notice thereof published on the Division's hearing docket;

(2) That offset operators, purchaser and transporter have been duly notified and have assented to such application in writing or by failure to object within 20 days following date of hearings stated on said docket;

(3) That evidence contained in the application and attachments thereto are persuasive that underground waste will be prevented by the granting of the application in that significant volumes of gas will be recovered that otherwise would be left unrecovered;

(4) That there appears to be no likelihood of impairment of correlative rights which would be caused by the requested classification of the well;

(5) That from the evidence submitted it appears a minimum flow rate of 40 Mcf per day is needed to prevent loss of recoverable hydrocarbons from the well;

(6) That this classification, in accordance with Rule 412 A should expire in one year unless renewed by request for extension and adequate supporting data.

IT IS THEREFORE ORDERED THAT:

The Jack A. Cole Hugh Wash Federal Well No. 1 located in Unit J of Section 23, Township 27 North, Range 13 West, NMPM, San Juan County, New Mexico is hereby classified as a hardship gas well in the Basin Dakota pool subject to the following terms and conditions:

(a) The well will be given priority access to the available gas market;

(b) The well shall accumulate overproduction and under production but shall not be shut-in because of overproduction;

(c) The minimum flow rate for the well shall be 40 MCFD;

(d) The well shall not be produced at a rate in excess of 40 MCFD as long as it is overproduced on a cumulative basis;

(e) The hardship classification and minimum allowable shall commence on the first day of the month following the date of this order and shall be retained only until the last day of the month one year after the date of this order, unless extended under the provisions of Rule 412 A; and

(f) The well shall be subject to all of the provisions of Rule 412 during the term of this order and any extension thereof.

Approved at Santa Fe, New Mexico, on this 8th day of April, 1986.

R. L. STAMETS, Director

Form 9–331
Dec. 1973

Form Approved.
Budget Bureau No. 42–R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Jack A. Cole

3. ADDRESS OF OPERATOR
P. O. Box 191, Farmington, N.M. 87499

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1850' FSL, 1520' FEL
AT TOP PROD. INTERVAL: Same
AT TOTAL DEPTH: Same

5. LEASE
NM-33041

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Hugh Wash Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 23-T27N-R13W

12. COUNTY OR PARISH
~~Rio Arriba~~ San Juan

13. STATE
N.M.

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5948' GL, 5960' KB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☒		☐
(other)			

(NOTE: Report results of multiple completion or zone change on Form 9–330.)

RECEIVED
JUL 01 1986
BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

See attached for proposed plugging procedure.

RECEIVED
JUL 16 1986
OIL CON. DIV.
DIST. 3

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Dewayne Blanchett TITLE Production Superintendent DATE July 1, 1986

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

APPROVED
JUL 15 1986
/s/ Tom Kalla
FOR AREA MANAGER
FARMINGTON RESOURCE AREA

*See Instructions on Reverse Side
NMOCC

Jack A. Cole
Hugh Wash Federal No. 1
Proposed Plugging Procedure

4½" casing set at 5988'
PBTD - 5970'

Perforations 5868' - 5944'

1. Set 25 sack cement plug, in 4½" casing, from 5590' to 5890'. Allow plug to set up and tag plug prior to setting further plugs.

2. Set 10 sack cement plugs in the following intervals:
   A. 4910' to 5010'
   B. 2080' to 2180'
   C. 1260' to 1360'
   D. 210' to 310'

3. Set 5 sack in top of 4½" casing with surface marker.

Verbal approval received from Errol Becher 6-30-86.

Proposed starting date 7-3-86.

Form 9–331
Dec. 1973

Form Approved.
Budget Bureau No. 42–R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
JACK A. COLE

3. ADDRESS OF OPERATOR
P. O. BOX 191, FARMINGTON, N.M. 87499

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1850' FSL, 1520' FEL
AT TOP PROD. INTERVAL: SAME
AT TOTAL DEPTH: SAME

5. LEASE
NM-33041

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
HUGH WASH FEDERAL

9. WELL NO.
#1

10. FIELD OR WILDCAT NAME
BASIN DAKOTA

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC. 23-T27N-R13W

12. COUNTY OR PARISH
~~RIO ARRIBA~~ SAN JUAN

13. STATE
N.M.

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5948' GL, 5960' KB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	XXX
(other)		

RECEIVED
JUL 11 1986
BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

(NOTE: Report results of multiple completion or zone change on Form 9–330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

7-08-86 SEE ATTACHED PLUGGING PROCEDURE.

Approved as to plugging of the well bore.
Liability under bond is retained until
surface restoration is completed.

RECEIVED
JUL 16 1986
OIL CON. DIV.
DIST. 3

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Dawayne Blanchett TITLE PROD. SUPT. DATE JULY 9, 1986

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE JUL 15 1986
CONDITIONS OF APPROVAL, IF ANY:

APPROVED
For AREA MANAGER
FARMINGTON RESOURCE AREA

*See Instructions on Reverse Side

NMOCD

Cole Production Co.

(505) 325-1415
P.O. Box 191
3001 Northridge Dr
Farmington, New Mexico 87499

HUGH WASH FEDERAL #1

PLUGGING AND ABANDONING REPORT

7-07-86 Spotted 25 sacks class "B" cement in 4½" casing from 5900' to 5600' at 5:30 p.m.. Let cement set 14 hours. Tagged cement at 5630'.

Set 10 sacks class "B" cement plugs in the following intervals:

a) 4910' to 5010'
b) 2080' to 2180'
c) 1260' to 1360'
d) 210' to 310'

Set 5 sacks class "B" cement plugs in top of cut-off 4½" casing with dry hole marker. Production equipment, with the exception of El Paso's has been removed.