

ARMSTRONG ENERGY CORPORATION

**APPLICATION OF ARMSTRONG ENERGY CORPORATION FOR A
PRESSURE MAINTENANCE PROJECT AND FOR QUALIFICATION OF
THE PROJECT AREA FOR THE RECOVERED OIL TAX RATE PURSUANT
TO THE ENHANCED OIL RECOVERY ACT**

**NORTHEAST LEA-DELAWARE POOL
LEA COUNTY, NEW MEXICO**

CASE No. 12885

**DATA PREVIOUSLY SUBMITTED IN CASE No.: 11436 ON DECEMBER 7, 1995
AND APPROVED BY ORDER No.: R-10541 ON FEBRUARY 6, 1996**

HEARD BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

ON

JUNE 27, 2002

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 12885 Exhibit No. 3
Submitted by:
ARMSTRONG ENERGY CORPORATION
Hearing Date: June 27, 2002

**PECOS PETROLEUM ENGINEERING, INC.
ROSWELL, NEW MEXICO**

MOBIL LEA STATE PRESSURE MAINTENANCE PROJECT

PRODUCTION SUMMARY

		<u>CUM. 3/02</u>	<u>3/02 DAILY PROD.</u>	<u>REMAINING PRIMARY PRODUCTION</u>	<u>ULTIMATE PRIMARY RECOVERY</u>
MOBIL LEA STATE #1					
	OIL	191,421	15.4	73,703	265,124
	GAS	251,962	30.5	162,146	414,108
	WATER	26,666	5.0		
MOBIL LEA STATE #2					
(PROD. INCLUDE	OIL	327,813	70.0	195,282	523,095
1ST SAND ZONE	GAS	347,640	100.2	390,564	738,204
	WATER	34,277	6.7		
MOBIL LEA STATE #3					
	OIL	146,895	17.2	77,877	224,772
	GAS	224,609	35.8	155,754	380,363
	WATER	133,163	24.2		
MOBIL LEA STATE #4					
	OIL	147,593	19.4	93,264	240,857
	GAS	231,237	109.3	158,549	389,786
	WATER	39,827	51.7		
TOTALS	OIL	813,722	121.9	440,126	1,253,848
	GAS	1,055,448	275.8	867,013	1,922,461
	WATER	233,933	87.7		

INJECTION WELL LOCATION

<u>LOCATION</u>	<u>5500 DAYS ULT., BO</u>	<u>INCREASE BO</u>
1 SE/SE/SW	1,732,500	44,400
2 SE/SW/SE	1,704,800	16,700
3 SW/SE/SW	1,736,500	48,400
4 SE/SW/SW	1,688,100	0
5 SW/SE/SW	1,716,400	28,300
6 NW/SE/SW	1,731,500	43,400

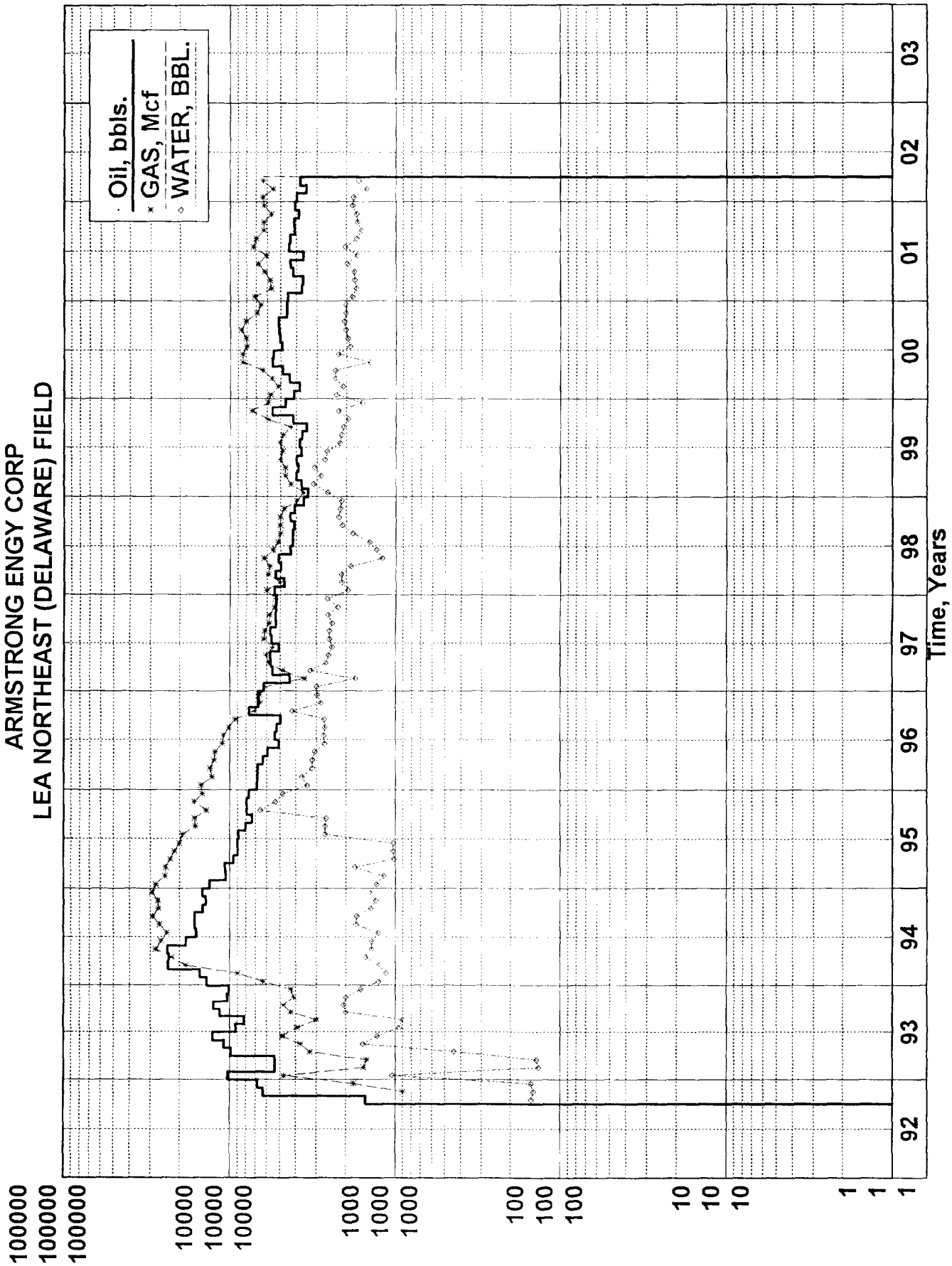
ADDITIONAL RECOVERY DUE TO INJECTION OF 500 BWPD

206,000 BO TO 306,000 BO

INJECTION WELL AND EQUIPMENT COSTS

DHC	\$305,005
COMPL. COSTS	\$307,712
	\$612,717

MOBIL LEA STATE 1, 2, 3 & 4
 ARMSTRONG ENGY CORP
 LEA NORTHEAST (DELAWARE) FIELD



S/2 SECTION 2 T19S-R34E

MLS 2	MLS 1	MS 1	
MLS 3	MLS 4		
4	6	1	2
	3		
	5		

1) WELL REPORT: Time-Step = 483 Time = 5500.0000 days

WELL #	ID	LOCATION I J K	CALC BHFP	SPEC BHFP	SPEC PI	RATE			WOR	CUMULATIVE		
						OIL STB/D	GAS MCF/D	WATER STB/D		OIL MSTB	GAS MMCF	WATER MSTB
1	MLS-1	7 15 1	-1.	0.	0.1300	48.4	136.	15.9 2817.7	0.330	335.6	594.	99.6
2	MLS-2	7 11 1	-1.	0.	0.1800	36.8	307.	15.1 8328.2	0.409	329.9	1294.	108.9
3	MLS-3	10 11 1	-1.	0.	0.1000	31.0	20.	13.1 636.3	0.423	236.6	275.	77.1
4	MLS-4	9 14 1	-1.	0.	0.0900	27.7	15.	18.1 523.9	0.652	245.4	191.	78.2
5	MF-8	8 8 1	-1.	0.	0.0050	1.2	9.	0.5 7913.2	0.407	10.7	60.	3.7
6	MF-4	11 6 1	-1.	0.	0.0500	10.9	57.	4.3 5169.3	0.396	108.7	267.	34.9
8	NL-10	14 6 1	-1.	0.	0.2000	6.3	6.	80.8 940.4	12.808	131.1	155.	388.8
10	NL-6	14 2 1	-1.	0.	1.3000	22.8	194.	156.8 8507.3	6.877	334.5	924.	977.0
12	MS-2I	11 15 1	4567.	0.	0.3000	0.0	0.	-500.0 0.0	0.000	0.0	0.	-1472.5
TOTALS						185.1	742.8	-195.4		1732.5	3760.9	295.8

2) WELL REPORT: Time-Step = 473 Time = 5500.0000 days

WELL #	ID	LOCATION I J K	CALC BHFP	SPEC BHFP	SPEC PI	RATE			WOR	CUMULATIVE		
						OIL STB/D	GAS MCF/D	WATER STB/D		OIL MSTB	GAS MMCF	WATER MSTB
1	MLS-1	7 15 1	-1.	0.	0.1300	46.9	141.	15.3 2997.6	0.326	332.5	568.	98.3
2	MLS-2	7 11 1	-1.	0.	0.1800	31.8	345.	14.110834.5	0.444	323.5	1284.	107.2
3	MLS-3	10 11 1	-1.	0.	0.1000	26.3	15.	11.6 565.7	0.442	224.2	353.	74.3
4	MLS-4	9 14 1	-1.	0.	0.0900	35.1	25.	11.0 719.1	0.313	236.9	258.	69.8
5	MF-8	8 8 1	-1.	0.	0.0050	1.1	10.	0.5 9054.5	0.421	10.9	54.	3.7
6	MF-4	11 6 1	-1.	0.	0.0500	10.2	66.	4.2 6546.0	0.414	108.9	282.	35.1
8	NL-10	14 6 1	-1.	0.	0.2000	6.8	17.	76.4 2488.2	11.307	132.2	175.	380.9
10	NL-6	14 2 1	-1.	0.	1.3000	23.3	192.	158.5 8246.1	6.803	335.7	960.	973.8
12	MS-2I	11 19 1	3068.	0.	0.3000	0.0	0.	-500.0 0.0	0.000	0.0	0.	-1472.5
TOTALS						181.5	810.9	-208.3		1704.8	3933.5	270.6

3) WELL REPORT: Time-Step = 484 Time = 5500.0000 days

WELL #	ID	LOCATION			CALC BHFP	SPEC BHFP	SPEC PI	RATE				WOR	CUMULATIVE					
		I	J	K				OIL STB/D	GAS MCF/D	WATER STB/D	GOR		OIL MSTB	GAS MMCF	WATER MSTB			
1	MLS-1	7	15	1	-1.	0.	0.1300	40.9	146.	13.9	3558.6	0.341	320.1	683.	96.5			
2	MLS-2	7	11	1	-1.	0.	0.1800	40.8	166.	15.0	4062.0	0.367	338.3	1129.	109.7			
3	MLS-3	10	11	1	-1.	0.	0.1000	26.8	11.	19.2	419.0	0.714	245.2	251.	84.7			
4	MLS-4	9	14	1	-1.	0.	0.0900	29.7	13.	15.6	445.1	0.526	246.1	196.	76.2			
5	MF-8	8	8	1	-1.	0.	0.0050	1.5	5.	0.5	3488.9	0.349	11.0	57.	3.8			
6	MF-4	11	6	1	-1.	0.	0.0500	12.2	47.	4.6	3875.4	0.376	109.8	255.	35.1			
8	NL-10	14	6	1	-1.	0.	0.2000	6.7	10.	81.7	1504.5	12.246	131.0	142.	393.7			
10	NL-6	14	2	1	-1.	0.	1.3000	22.7	197.	153.6	8678.1	6.764	335.0	926.	976.8			
12	MS-2I	11	13	1	4450.	0.	0.3000	0.0	0.	-500.0	0.0	0.000	0.0	0.	-1472.5			
TOTALS																1736.5	3639.6	304.1

4) WELL REPORT: Time-Step = 488 Time = 5500.0000 days

WELL #	ID	LOCATION			CALC BHFP	SPEC BHFP	SPEC PI	RATE				WOR	CUMULATIVE					
		I	J	K				OIL STB/D	GAS MCF/D	WATER STB/D	GOR		OIL MSTB	GAS MMCF	WATER MSTB			
1	MLS-1	7	15	1	-1.	0.	0.1300	34.3	180.	12.8	5236.8	0.372	308.9	716.	94.3			
2	MLS-2	7	11	1	-1.	0.	0.1800	48.5	119.	16.6	2446.9	0.342	349.1	949.	111.0			
3	MLS-3	10	11	1	-1.	0.	0.1000	5.5	2.	81.9	438.4	14.836	195.5	209.	199.2			
4	MLS-4	9	14	1	-1.	0.	0.0900	34.3	21.	10.5	622.3	0.306	238.1	236.	69.7			
5	MF-8	8	8	1	-1.	0.	0.0050	2.1	2.	0.6	1080.6	0.303	12.5	38.	4.0			
6	MF-4	11	6	1	-1.	0.	0.0500	16.4	20.	5.3	1195.3	0.321	115.3	206.	35.9			
8	NL-10	14	6	1	-1.	0.	0.2000	7.7	10.	83.8	1286.7	10.834	131.8	142.	399.8			
10	NL-6	14	2	1	-1.	0.	1.3000	25.2	240.	160.7	9535.2	6.387	336.8	938.	984.8			
12	MS-2I	11	11	1	4354.	0.	0.3000	0.0	0.	-500.0	0.0	0.000	0.0	0.	-1472.5			
TOTALS																1688.1	3434.2	426.3

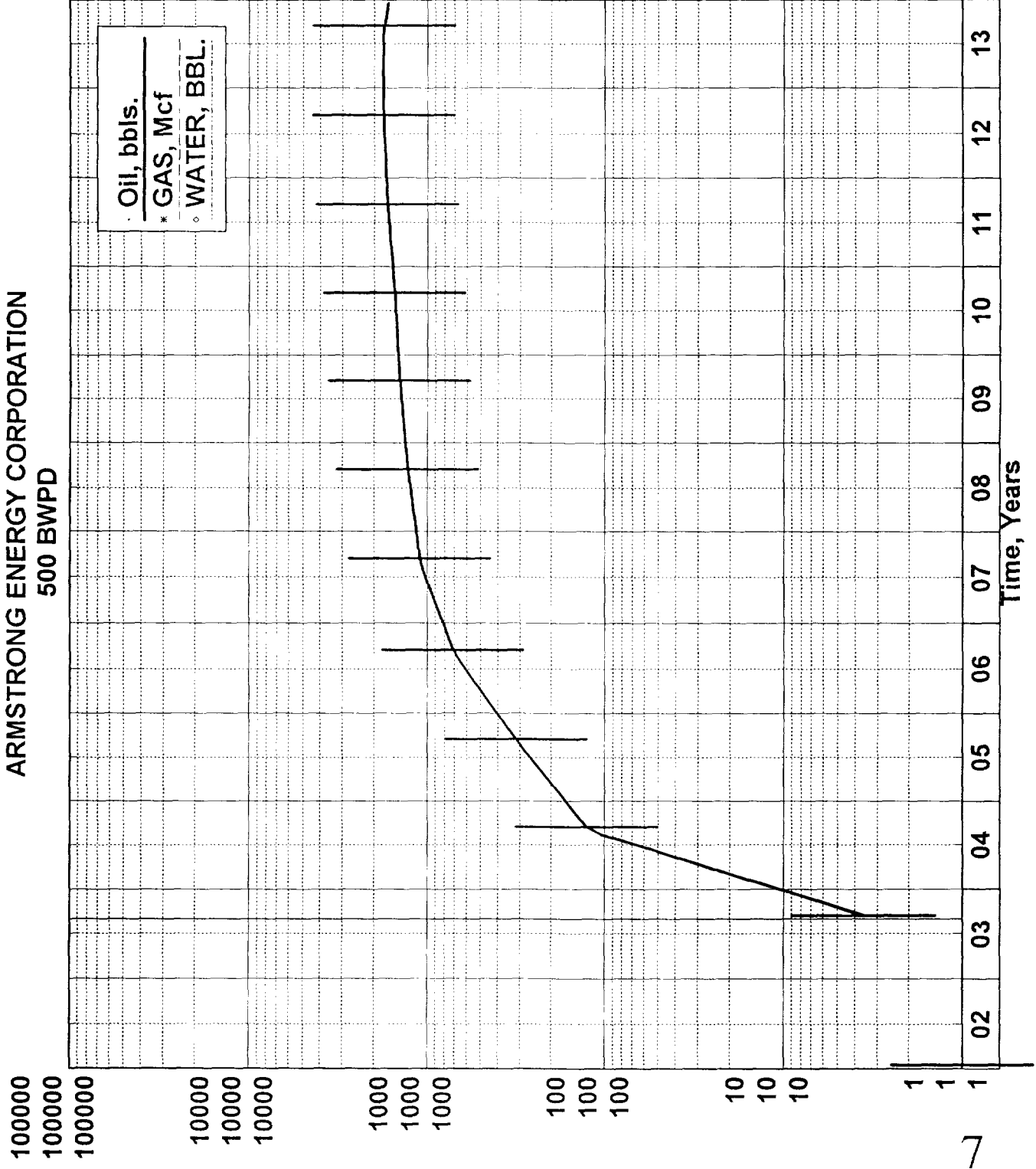
5) WELL REPORT: Time-Step = 468 Time = 5500.0000 days

WELL #	ID	LOCATION			CALC BHFP	SPEC BHFP	SPEC PI	RATE				CUMULATIVE			
		I	J	K				OIL STB/D	GAS MCF/D	WATER STB/D	GOR	WOR	OIL MSTB	GAS MMCF	WATER MSTB
1	MLS-1	7	15	1	-1.	0.	0.1300	38.0	164.	13.5	4304.7	0.355	315.8	658.	95.4
2	MLS-2	7	11	1	-1.	0.	0.1800	34.5	309.	14.7	8953.9	0.425	332.2	1207.	109.0
3	MLS-3	10	11	1	-1.	0.	0.1000	26.9	18.	16.1	670.8	0.599	237.6	261.	81.8
4	MLS-4	9	14	1	-1.	0.	0.0900	33.1	29.	11.2	872.3	0.339	241.1	228.	71.2
5	MF-8	8	8	1	-1.	0.	0.0050	1.2	9.	0.5	7676.5	0.378	10.3	94.	3.6
6	MF-4	11	6	1	-1.	0.	0.0500	12.5	46.	4.6	3691.2	0.372	111.1	259.	35.4
8	NL-10	14	6	1	-1.	0.	0.2000	6.4	4.	86.9	627.7	13.583	131.1	136.	405.6
10	NL-6	14	2	1	-1.	0.	1.3000	23.7	190.	164.4	8028.3	6.942	337.1	919.	993.9
12	MS-2I	12	13	1	2678.	0.	0.3000	0.0	0.	-500.0	0.0	0.000	0.0	0.	-1472.5
TOTALS								176.4	769.6	-188.0			1716.4	3761.7	323.4

6) WELL REPORT: Time-Step = 487 Time = 5500.0000 days

WELL #	ID	LOCATION			CALC BHFP	SPEC BHFP	SPEC PI	RATE				CUMULATIVE			
		I	J	K				OIL STB/D	GAS MCF/D	WATER STB/D	GOR	WOR	OIL MSTB	GAS MMCF	WATER MSTB
1	MLS-1	7	15	1	-1.	0.	0.1300	48.0	87.	15.1	1807.6	0.314	332.6	597.	98.7
2	MLS-2	7	11	1	-1.	0.	0.1800	57.1	67.	17.6	1176.5	0.308	361.1	892.	112.6
3	MLS-3	10	11	1	-1.	0.	0.1000	16.1	8.	36.6	467.6	2.271	227.6	235.	102.0
4	MLS-4	9	14	1	-1.	0.	0.0900	14.0	10.	42.5	707.7	3.023	227.2	170.	105.5
5	MF-8	8	8	1	-1.	0.	0.0050	2.0	0.	0.6	205.3	0.290	11.5	42.	3.8
6	MF-4	11	6	1	-1.	0.	0.0500	11.5	50.	4.4	4381.9	0.386	108.3	254.	34.7
8	NL-10	14	6	1	-1.	0.	0.2000	6.8	10.	73.9	1414.5	10.920	131.0	170.	376.4
10	NL-6	14	2	1	-1.	0.	1.3000	20.9	204.	137.9	9773.3	6.595	332.1	920.	958.4
12	MS-2I	10	13	1	4469.	0.	0.3000	0.0	0.	-500.0	0.0	0.000	0.0	0.	-1472.5
TOTALS								176.4	436.0	-171.4			1731.5	3278.3	319.5

INJECTOR ARMSTRONG ENERGY CORPORATION 500 BWPD



PSD 09/01/2003
Phase OIL
Type Exp
Decline(%) -3900.0
qi 3
Cum(M) 01/2000 0.000
Remaining(M) 206.407
Ultimate(M) 206.407
OGRE Cum(M) 0.000
OGRE Ult(M) 206.407

AUTHORIZATION FOR EXPENDITURE

LEASE/WELL NAME:	MOBIL LEA STATE #8 WIW	DEPTH:	6250FT.
FIELD NAME:	NORTHEAST LEA DELAWARE	OBJECTIVE:	DELAWARE
LEGAL DESCRIPTION:	330' FSL & 1650' FWL SECTION 2-T20S-R34E	COUNTY/STATE:	LEA, N.M.
DESCRIPTION OF WORK:	DRILL A WELL FOR WATERINJECTION INTO THE CHERRY CANYON THIRD SAND INTERVAL		

ACCOUNT CODE	DESCRIPTION	DRILLING	COMPLETION	TOTAL
INTANGIBLE DRILLING COSTS				
	SURVEYING	1,200		
	LOCATION , ROAD, CONDUCTOR PIPE & DAMAGES	25,000		
	DRILLING - FOOTAGE RATE \$18.00/FT 6250 FT.	119,250		
	DRILLING- DAYWORK \$4600/DAY 3 DAYS	14,628		
	CEMENT & SERVICES- SURFACE CASING 1200SX	19,080		
	SUPERVISION 20 DAYS @ \$650	13,000		
	GEOLOGIST	2,000		
	MUD MATERIALS & SPECIAL EQUIPMENT	12,720		
	WATER 10,000 BBLS F.W. & 10,000 BBLS BRINE	25,002		
	HAULING AND TRANSPORTATION	3,000		
	LOGGING	12,000		
	MUD LOGGER \$650/DAY 10 DAYS	6,890		
	PIT LINING AND FENCING	3,500		
	CASING CREW SURFACE CASING	2,300		
	ADMINISTRATIVE OVERHEAD	5,000		
	LEGAL	2,000		
	CONTRACT LABOR	1,500		
	MISCELLANEOUS	10,000		
INTANGIBLE COMPLETION COSTS				
	COMPLETION UNIT 7DAYS @ \$150/HR.		12,600	
	REVERSE UNIT		3,500	
	WATER 2000 BBLS.		2,650	
	CEMENTING SERVICES PRODUCTION CASING 2000 SX		37,800	
	PERFORATING AND BOND LOG 1 ZONE		6,360	
	STIMULATION: 1 ACID TREATMENT		4,770	
	1 FRAC TREATMENT		60,000	
	WELDING		1,000	
	SUPERVISION 10 DAYS @ \$650/DAY		6,500	
	TRANSPORTATION, INSTALLATION & LABOR		3,000	
	EQUIPMENT RENTAL: 2- FRAC TANKS		780	
	5 1/2" PACKER		1,590	
	MISCELLANEOUS (TUBING)		5,000	
	LABOR, ROUSTABOUTS		12,720	
	CASING CREW PRODUCTION CASING		3,710	
	ADMINISTRATIVE OVERHEAD		1,500	
	ELECTRICAL		6,000	
	MISCELLANEOUS		10,000	
	TOTAL INTANGIBLE COSTS	278,070	179,480	457,550
TANGIBLE COMPLETION COSTS				
	WELLHEAD	4,500	2,000	
	SURFACE CASING 9 5/8" - 1700' FT.	22,435		
	PRODUCTION CASING 5 1/2" - 6250 FT.		38,094	
	TUBING 2 3/8" P.C. - 6000FT.		24,486	
	BUILDING		7,420	
	INJECTION PUMP J-100		24,513	
	DOWNHOLE EQUIPMENT P.C. PACKER AND ON-OFF TOOL		5,500	
	ANCHORS		850	
	FLOWLINES VALVES & FITTINGS		7,950	
	SPECIAL EQUIPMENT (FILTERS, MISC.)		10,000	
	TANK COATING		7,420	
	TOTAL TANGIBLE COSTS	26,935	128,232	155,167
	TOTAL WELL COST	305,005	307,712	612,717

1. 16" CONDUCTOR @ 40'.
2. 9 5/8" SURFACE CASING @ 1700'.
3. 5 1/2" CASING @ 6250'.
4. PERFORATE, ACIDIZE AND FRAC THIRD SAND ZONE @ 5950'-6000'.
5. RUN P.C. PACKER, ON-OFF TOOL, PROFILES AND P.C. 2 3/8" TUBING WITH PACKER AT +/- 5950'.
6. PUT WELL ON INJECTION AT + 500 BWPD.

PREPARED BY:	BRUCE A. STUBBS	TITLE:	PETROLEUM ENGINEER	DATE:	5-13-2002
ARMSTRONG ENERGY CORPORATION					
APPROVED BY:	ROBERT G. ARMSTRONG	TITLE:	PRESIDENT	DATE:	5-13-2002
APPROVED BY:		TITLE:		DATE:	
COMPANY:		%W.I.			
IT IS RECOGNIZED THAT THE AMOUNTS HEREIN ARE ESTIMATES ONLY AND APPROVAL OF THIS A.F.E. SHALL EXTEND TO THE ACTUAL COSTS INCURRED IN THE OPERATION SPECIFIED ABOVE, WHETHER MORE OR LESS THAN SET OUT HEREIN.					