...strict I - (505) 393-6161
...Box 1980
...bbs, NM 88241-1980
...strict II - (505) 748-1283
...S. First
...tesia, NM 88210
...strict III - (505) 334-6178
...0 Rio Brazos Road
...tec, NM 87410
...strict IV

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-140
Originated 11/1/95

Submit Original
Plus 2 Copies
to appropriate
District Office

JAN - 7 19

H-0518 1/9

APPLICATION FOR QUALIFICATION OF WELL WORKOVER PROJECT AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION AND ALL ATTACHMENTS MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

I. Operator: CHEVRON U.S.A., INC. OGRID #: 4323

Address: P. O. BOX 1150, MIDLAND, TX 79702

Contact Party: MICHAEL VILLALVA Phone: (915) 687-7262

II. Name of Well: ARROWHEAD GRAYBURG UNIT #247 API #: 30-025-10362
Location of Well: Unit Letter D, 660 Feet from the NORTH line and 660 feet from the WEST line,
Section 19, Township 22S, Range 37E, NMPM, LEA County

III. Date Workover Procedures Commenced: 1/29/96
Date Workover Procedures were Completed: 1/31/96

IV. Attach a description of the Workover Procedures undertaken to increase the projection from the Well.

V. Attach an estimate of the production rate of the Well (a production decline curve or other acceptable method, and table showing monthly oil and/or gas Project Production) based on at least twelve (12) months of established production which shows the future rate of production based on well performance prior to performing Workover.

VI. Pool(s) on which Production Projection is based:

ARROWHEAD GRAYBURG

VII. AFFIDAVIT:

State of TEXAS)
) ss.
County of MIDLAND)

J. K. RIPLEY, being first duly sworn, upon oath states:

1. I am the Operator or authorized representative of the Operator of the above referenced Well.

2. I have made, or caused to be made, a diligent search of the production records which are reasonably available and contain information relevant to the production history of this Well.

3. To the best of my knowledge, the data used to prepare the Production Projection for this Well is complete and accurate and this projection was prepared using sound petroleum engineering principles.

J. K. Ripley
(Name)

TECHNICAL ASSISTANT
(Title)

SUBSCRIBED AND SWORN TO before me this 2nd day of January, 19 97

Maggie M. Bermea
Notary Public, State of Texas
My Commission Expires 07-30-97

Maggie M. Bermea
Notary Public for State of Texas

My Commission expires: 7/30/97

FOR OIL CONSERVATION DIVISION USE ONLY:

VIII. CERTIFICATION OF APPROVAL:

This Application for Qualification of Well Workover Project is hereby approved and the above referenced Well is designated as a Well Workover Project pursuant to the "Natural Gas and Crude Oil Production Incentive Act" (Laws 1995, Chapter 15, Sections 1 through 8). The Oil Conservation Division hereby verifies the Production Projection for the Well Workover Project attached to this application. By copy of this Application and Certification of Approval, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project has been completed as of 1-31, 1996

Paul F. Kautz
District Supervisor, District 1
Oil Conservation Division

Date: 11/20/98 see attached letter

IX. DATE OF NOTIFICATION TO THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT.

DATE: _____

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
DISTRICT I HOBBS
PO BOX 1980, Hobbs, NM 88241
(505) 393-6161
FAX (505) 393-0720

Jennifer A. Salisbury
CABINET SECRETARY

November 20, 1998

Michael Villalva
Chevron USA INC
PO BOX 1150
Midland, TX 79702

Joan Ishimoto
O & G Processing
Taxation & Revenue Dept
PO BOX 2308
Santa Fe, NM 87504-2308

Subject: Form C-140 for Chevron USA INC, Arrowhead Grayburg Unit # 247

Dear Michael Villalva and Joan Ishimoto

The above referenced well does qualify as a well workover project. The workover was completed 1/31/96. Chevron did file this application within the 1 year requirement. It was received in our office on 1/7/97. After it was received, the application was placed in the well file and refiled instead of being routed to the appropriate person for review and approval. This application is being submitted late due to an error by the Oil Conservation Division. Therefore I recommend that this application be approved and I apologize for any inconvenience it may have caused.

Yours very truly,

OIL CONSERVATION DIVISION

Chris Williams
District I, Supervisor

ARROWHEAD GRAYBURG UNIT NO. 247
660' FNL, 660' FWL SEC 19, T22S-R37E
LEA COUNTY, NEW MEXICO

Proposed Procedure

1) MIRU pulling unit. ND wellhead. POOH with rods and pump. NU BOPE. Tag TD w/ production tubing. POOH w/ 2-3/8" production tubing tallying out. (NOTE: August 1991 tubing detail shows partial string of 10V tubing. Check w/ production specialist to determine if tubing string has changed.)

   If no fill is encountered during TD tag in Step No. 1, proceed to Step No. 3.

2) RIH w/ 4-3/4" bit and clean out to 3,900'. Circ. clean (if fill or scale cleaned out). POOH w/ bit.

3) RIH w/ 5-1/2" pkr and tubing unloader valve. Set pkr above perfs at ± 3500'. Open unloader valve and load hole. Pickle tubing with 350 gallons 15% NEFE HCl displacing acid to end of tubing at 1/2 BPM. Reverse out pickle acid from tubing catching five SAMPLES of pickle fluid for iron content analysis. Close unloader valve and fish standing valve.

   NOTE: Acid Job in Step 4 should be pumped in early morning to allow maximum amount of swab time to recover released fines.

4) Release pkr and RIH. Set pkr at ± 3700' (Csg shoe at 3712' by WLM). Pump acid job on open hole 3718' to 3900' as detailed below using 3400 gallons BJ's RESI-SOL II PLUS (Viscosified Acid & Toluene Mixture) (acid recipe at end of procedure) in 4 stages at 2 - 3 BPM limiting treating pressure to 1200 psi. Use **FINE** rock salt for diversion.

   A. Pump 850 gallons Viscosified RESI-SOL II PLUS acid mixture.
   B. Pump 850 gallons Viscosified RESI-SOL II PLUS dropping 1000 pounds of FINE rock salt in leading edge of acid stage.
   C. Repeat steps B two times varying block size depending on observed in previous block stages. (Offset well stimulation used block sizes rangeing from 1000 to 2500 pounds).
   D. Flush to formation w/ tubing volume plus 10 barrels of produced water.
   E. Shut well in for 2 hours.

5) Swab back load. Continue swabbing for oil cut and fluid entry rate. SION for final fluid level and oil cut. Report results to Petroleum Engineering.

6) Release pkr. RIH w/ pkr and ensure hole is clean to TD @ 3900'. POOH w/ pkr.

7) RIH with 2-3/8" production tbg per Operations Supervisor's recommendation. ND BOPE. NU wellhead. RIH w/ pump and rod string per Operations Supervisor's recommendation. Check pump action and test tbg to 500 psi.

8) RD. MOL. Clean location. Turn well over to Operations Supervisor (Dwayne Duncan). Place well on production.

9) After a minimum of 5 days production and well is pumped off, Operations Supervisor's group may chemical squeeze well down annulus to prevent scale formation. Use the following scale inhibitor procedure:

A. Pressure up on tubing and shut-in.
B. Mix 5 gallons Unichem Techni-Wet 447 in 20 barrels clean produced water.
C. Pump mixture down casing annulus.
D. Mix 30 lbs. Calcium Chloride in 20 barrels of produced water. Then mix 110 gallons of Unichem Techni-Hib 794 in this solution.
E. Pump mixture down casing annulus.
F. Displace with 200 bbls. produced water containing 5 gallons Techni-Clean 2420.
G. Leave well shut-in for 24 hours before returning to production.

Acid Recipe (Step #4): To inhibit for 10,000 ppm iron @ 95 °F for 24 hours

BJ's RESI-SOL II PLUS system contains (per thousand gallons):

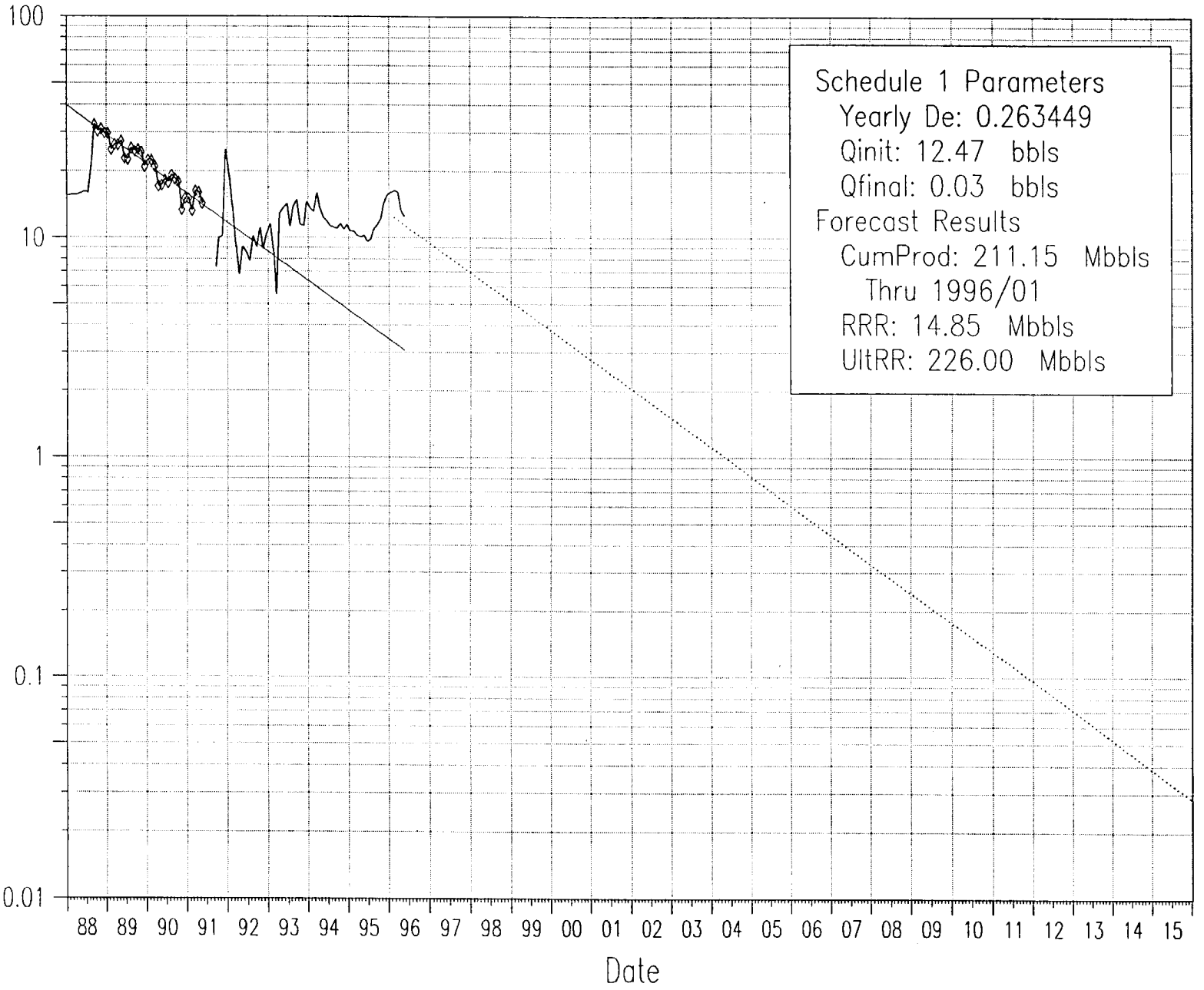
900 gal/M 15% HCl	(Inorganic Acid)
100 gal/M Toluene	(Aromatic Solvent)
20 gal/M Emulsifier	(Emulsifier and Surfactant)
5-6 gal/M FERROTROL-270	(Anti-Sludge Iron Control)
1 gal/M FERROTROL--271	(Iron Control Activator)
0.5 gal/M Inflo-150	(Penetrating Surfactant)
1 gal/M CI-23	(Corrosion Inhibitor)

John A. Langhoff/John Fricke/Wilson S. McClung
January 26, 1996

Workover Approval _____

LEASE : ARROWHEAD GRAYBURG UNIT 247

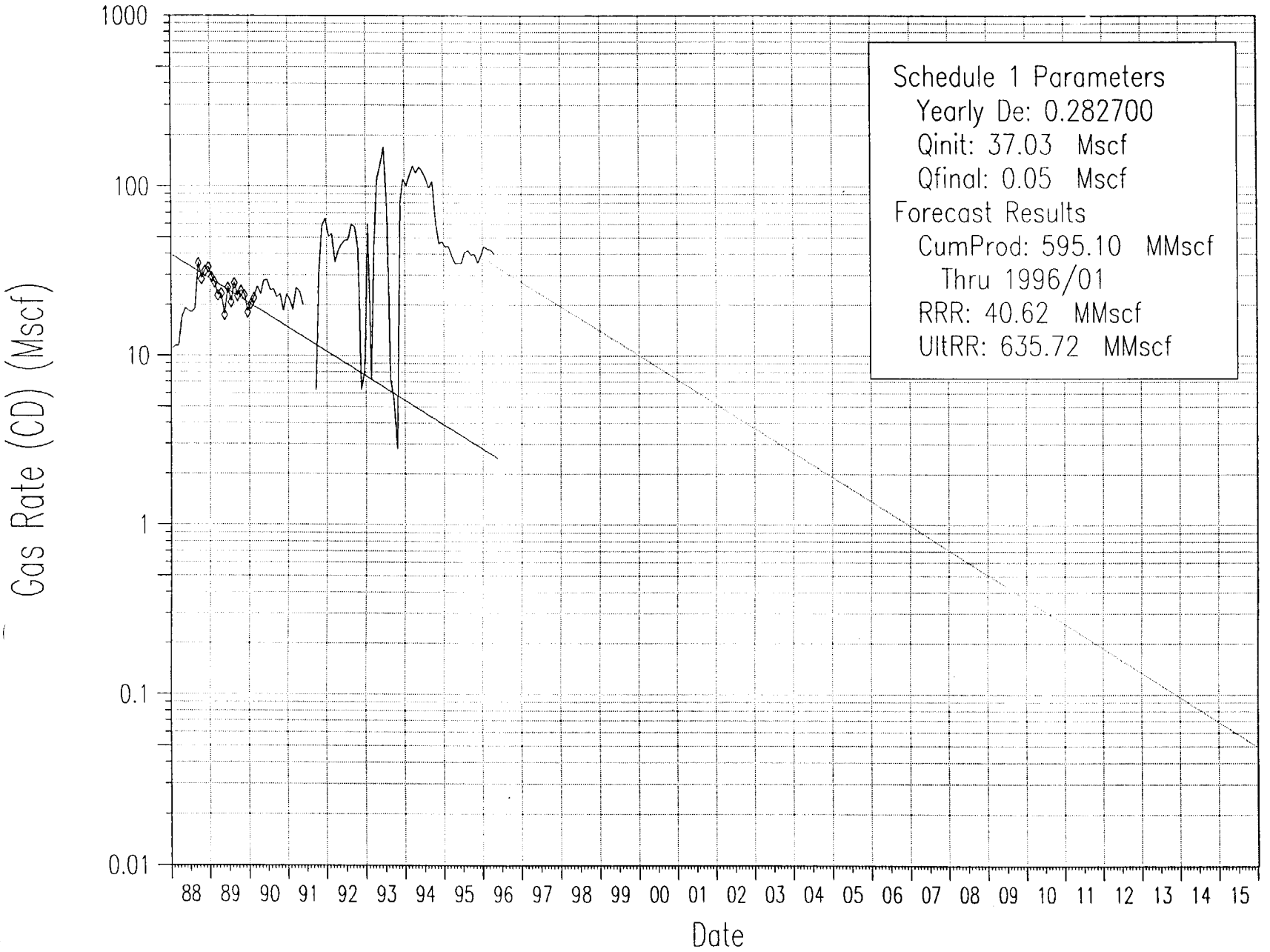
BEATAREA : GREG BURT



Mon Jul 22 13:13:02 1996

LEASE : ARROWHEAD GRAYBURG UNIT 247

BEATAREA : GREG BURT



Mon Jul 22 11:15:40 1996

LEASE : ARROWHEAD GRAYBURG UNIT 247
BEATAREA : GREG BURT

DATE	Oil Vol Prod bbls	Gas Vol Prod Mscf
8807	495	561
8808	639	588
8809	980	1071
8810	947	890
8811	937	964
8812	929	1046
8901	926	919
8902	706	769
8903	823	713
8904	795	709
8905	855	546
8906	691	768
8907	706	650
8908	794	842
8909	747	683
8910	784	762
8911	737	692
8912	654	565
9001	702	633
9002	632	624
9003	656	803
9004	519	695
9005	541	866
9006	553	844
9007	554	758
9008	599	769
9009	558	666
9010	561	721
9011	405	552
9012	472	715

LEASE : ARROWHEAD GRAYBURG UNIT 247
BEATAREA : GREG BURT

DATE	Oil Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
9507	305	0.00	1273	0.00
9508	341	0.00	1297	0.00
9509	345	0.00	1187	0.00
9510	378	0.00	1239	0.00
9511	434	0.00	1062	0.00
9512	487	0.00	1216	0.00
9601	500	0.00	1378	0.00
9602	474	357.06	1239	1059.14
9603	500	372.08	1311	1101.27
9604	397	351.02	1201	1036.64
9605	388	353.60	0	1041.94
9606	0	333.58	0	980.79
9607	0	336.03	0	985.81
9608	0	327.57	0	958.89
9609	0	309.03	0	902.61
9610	0	311.30	0	907.23
9611	0	293.68	0	853.99
9612	0	295.83	0	858.36
9701	0	288.39	0	834.92
9702	0	253.92	0	733.52
9703	0	274.06	0	789.94
9704	0	258.55	0	743.58
9705	0	260.44	0	747.38
9706	0	245.70	0	703.52
9707	0	247.50	0	707.12
9708	0	241.27	0	687.81
9709	0	227.62	0	647.44
9710	0	229.29	0	650.76
9711	0	216.31	0	612.57
9712	0	217.89	0	615.70
9801	0	212.41	0	598.88
9802	0	187.03	0	526.16
9803	0	201.86	0	566.62
9804	0	190.43	0	533.37
9805	0	191.83	0	536.10
9806	0	180.97	0	504.64
9807	0	182.30	0	507.22
9808	0	177.71	0	493.36
9809	0	167.65	0	464.41
9810	0	168.88	0	466.79
9811	0	159.32	0	439.39
9812	0	160.49	0	441.64
9901	0	156.45	0	429.58
9902	0	137.76	0	377.41
9903	0	148.68	0	406.44
9904	0	140.26	0	382.59
9905	0	141.29	0	384.54
9906	0	133.29	0	361.98
9907	0	134.27	0	363.83
9908	0	130.89	0	353.89

LEASE : ARROWHEAD GRAYBURG UNIT 247
BEATAREA : GREG BURT

DATE	Oil Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
9909	0	123.48	0	333.12
9910	0	124.39	0	334.83
9911	0	117.35	0	315.18
9912	0	118.21	0	316.79
10001 →(2000/01)	0	115.23	0	308.14
10002	0	105.09	0	280.39
10003	0	109.51	0	291.54
10004	0	103.31	0	274.43
10005	0	104.07	0	275.83
10006	0	98.18	0	259.64
10007	0	98.90	0	260.97
10008	0	96.41	0	253.85
10009	0	90.95	0	238.95
10010	0	91.62	0	240.17
10011	0	86.43	0	226.08
10012	0	87.07	0	227.23
10101	0	84.88	0	221.03
10102	0	74.73	0	194.19
10103	0	80.66	0	209.12
10104	0	76.09	0	196.85
10105	0	76.65	0	197.85
10106	0	72.31	0	186.24
10107	0	72.84	0	187.20
10108	0	71.01	0	182.08
10109	0	66.99	0	171.40
10110	0	67.48	0	172.27
10111	0	63.66	0	162.16
10112	0	64.13	0	162.99
10201	0	62.52	0	158.54
10202	0	55.04	0	139.29
10203	0	59.41	0	150.00
10204	0	56.05	0	141.20
10205	0	56.46	0	141.92
10206	0	53.26	0	133.59
10207	0	53.65	0	134.28
10208	0	52.30	0	130.61
10209	0	49.34	0	122.94
10210	0	49.70	0	123.57
10211	0	46.89	0	116.32
10212	0	47.23	0	116.92
10301	0	46.05	0	113.72
10302	0	40.54	0	99.91
10303	0	43.76	0	107.60
10304	0	41.28	0	101.28
10305	0	41.58	0	101.80
10306	0	39.23	0	95.83
10307	0	39.52	0	96.32
10308	0	38.52	0	93.69
10309	0	36.34	0	88.19
10310	0	36.61	0	88.64

LEASE : ARROWHEAD GRAYBURG UNIT 247
BEATAREA : GREG BURT

DATE	Oil Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
10311	0	34.54	0	83.44
10312	0	34.79	0	83.86
10401	0	33.92	0	81.57
10402	0	30.93	0	74.23
10403	0	32.23	0	77.18
10404	0	30.41	0	72.65
10405	0	30.63	0	73.02
10406	0	28.89	0	68.74
10407	0	29.11	0	69.09
10408	0	28.37	0	67.20
10409	0	26.77	0	63.26
10410	0	26.96	0	63.58
10411	0	25.44	0	59.85
10412	0	25.62	0	60.16
10501	0	24.98	0	58.51
10502	0	22.00	0	51.41
10503	0	23.74	0	55.36
10504	0	22.40	0	52.11
10505	0	22.56	0	52.38
10506	0	21.28	0	49.30
10507	0	21.44	0	49.56
10508	0	20.90	0	48.20
10509	0	19.72	0	45.37
10510	0	19.86	0	45.61
10511	0	18.74	0	42.93
10512	0	18.87	0	43.15
10601	0	18.40	0	41.97
10602	0	16.20	0	36.87
10603	0	17.48	0	39.71
10604	0	16.50	0	37.38
10605	0	16.62	0	37.57
10606	0	15.68	0	35.37
10607	0	15.79	0	35.55
10608	0	15.39	0	34.58
10609	0	14.52	0	32.55
10610	0	14.63	0	32.71
10611	0	13.80	0	30.79
10612	0	13.90	0	30.95
10701	0	13.55	0	30.11
10702	0	11.93	0	26.45
10703	0	12.88	0	28.48
10704	0	12.15	0	26.81
10705	0	12.24	0	26.95
10706	0	11.55	0	25.37
10707	0	11.63	0	25.50
10708	0	11.34	0	24.80
10709	0	10.70	0	23.35
10710	0	10.77	0	23.47
10711	0	10.16	0	22.09
10712	0	10.24	0	22.20

LEASE : ARROWHEAD GRAYBURG UNIT 247
BEATAREA : GREG BURT

DATE	Oil Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
10801	0	9.98	0	21.59
10802	0	9.10	0	19.65
10803	0	9.49	0	20.43
10804	0	8.95	0	19.23
10805	0	9.01	0	19.33
10806	0	8.50	0	18.20
10807	0	8.57	0	18.29
10808	0	8.35	0	17.79
10809	0	7.88	0	16.75
10810	0	7.94	0	16.83
10811	0	7.49	0	15.84
10812	0	7.54	0	15.92
10901	0	7.35	0	15.49
10902	0	6.47	0	13.61
10903	0	6.99	0	14.66
10904	0	6.59	0	13.80
10905	0	6.64	0	13.87
10906	0	6.26	0	13.05
10907	0	6.31	0	13.12
10908	0	6.15	0	12.76
10909	0	5.80	0	12.01
10910	0	5.85	0	12.07
10911	0	5.51	0	11.36
10912	0	5.55	0	11.42
11001	0	5.42	0	11.11
11002	0	4.77	0	9.76
11003	0	5.15	0	10.51
11004	0	4.85	0	9.90
11005	0	4.89	0	9.95
11006	0	4.61	0	9.36
11007	0	4.65	0	9.41
11008	0	4.53	0	9.15
11009	0	4.27	0	8.62
11010	0	4.31	0	8.66
11011	0	4.06	0	8.15
11012	0	4.09	0	8.19
11101	0	3.99	0	7.97
11102	0	3.51	0	7.00
11103	0	3.79	0	7.54
11104	0	3.58	0	7.10
11105	0	3.60	0	7.13
11106	0	3.40	0	6.72
11107	0	3.42	0	6.75
11108	0	3.34	0	6.57
11109	0	3.15	0	6.18
11110	0	3.17	0	6.21
11111	0	2.99	0	5.85
11112	0	3.01	0	5.88
11201	0	2.94	0	5.72
11202	0	2.68	0	5.20

LEASE : ARROWHEAD GRAYBURG UNIT 247
BEATAREA : GREG BURT

DATE	Oil Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
11203	0	2.79	0	5.41
11204	0	2.63	0	5.09
11205	0	2.65	0	5.12
11206	0	2.50	0	4.82
11207	0	2.52	0	4.84
11208	0	2.46	0	4.71
11209	0	2.32	0	4.43
11210	0	2.34	0	4.46
11211	0	2.20	0	4.19
11212	0	2.22	0	4.22
11301	0	2.16	0	4.10
11302	0	1.91	0	3.60
11303	0	2.06	0	3.88
11304	0	1.94	0	3.65
11305	0	1.95	0	3.67
11306	0	1.84	0	3.46
11307	0	1.86	0	3.47
11308	0	1.81	0	3.38
11309	0	1.71	0	3.18
11310	0	1.72	0	3.20
11311	0	1.62	0	3.01
11312	0	1.63	0	3.02
11401	0	1.59	0	2.94
11402	0	1.40	0	2.58
11403	0	1.51	0	2.78
11404	0	1.43	0	2.62
11405	0	1.44	0	2.63
11406	0	1.36	0	2.48
11407	0	1.37	0	2.49
11408	0	1.33	0	2.42
11409	0	1.26	0	2.28
11410	0	1.27	0	2.29
11411	0	1.20	0	2.16
11412	0	1.20	0	2.17
11501	0	1.17	0	2.11
11502	0	1.03	0	1.85
11503	0	1.12	0	2.00
11504	0	1.05	0	1.88
11505	0	1.06	0	1.89
11506	0	1.00	0	1.78
11507	0	1.01	0	1.79
11508	0	0.98	0	1.74
11509	0	0.93	0	1.64
11510	0	0.93	0	1.64
11511	0	0.88	0	1.55
11512	0	0.89	0	1.56