

strict I - (505) 393-0101
Box 1930
obs. NM 88241-1980
strict II - (505) 748-1293
S. First
esia, NM 88210
strict III - (505) 334-6178
Rio Brazos Road
ec. 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 11/1/93

Submit Original
Plus 2 Copies
to appropriate
District Office

14-0467

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 #168 API #: 30-025-08727
Location of Well: Unit Letter L, 1980 Feet from the South line and 660 feet from the West line,
Section 1, Township 22S, Range 36E, NMPM, Lea County

III. ✓ Date Workover Procedures Commenced: 05/07/97
Date Workover Procedures were Completed: 05/08/97

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)
County of MIDLAND) ss.

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.

(Name)

(Title)

SUBSCRIBED AND SWORN TO before me this 30th day of April, 1998

MAGGIE M. BERMEA
COMMISSION EXPIRES
July 30, 2001

Maggie M. Bermea

Notary Public for State of Texas

My Commission expires: July 30, 2001

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 5-8-, 1998

Paul E. Kautz
District Supervisor, District 4
Oil Conservation Division

Geologist

Date: 5/4/98

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

DATE: _____

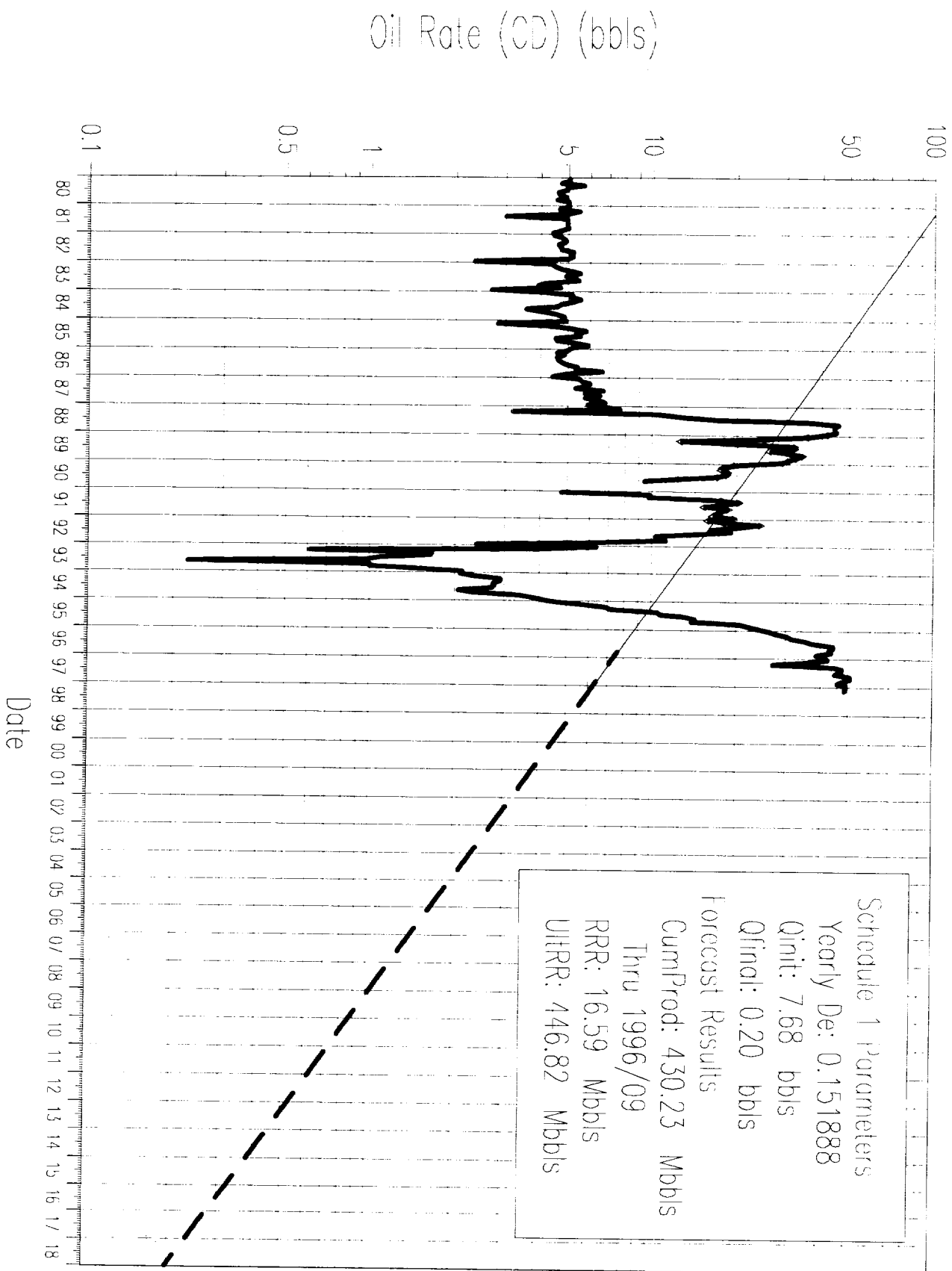
Arrowhead Grayburg Unit #168
Lea County, New Mexico

Summarized Workover Procedure

This workover was designed to upsize the existing pump with larger equipment in order to increase fluid production. Ultimately, the excess water will be pumped off and an increase in oil production will occur.

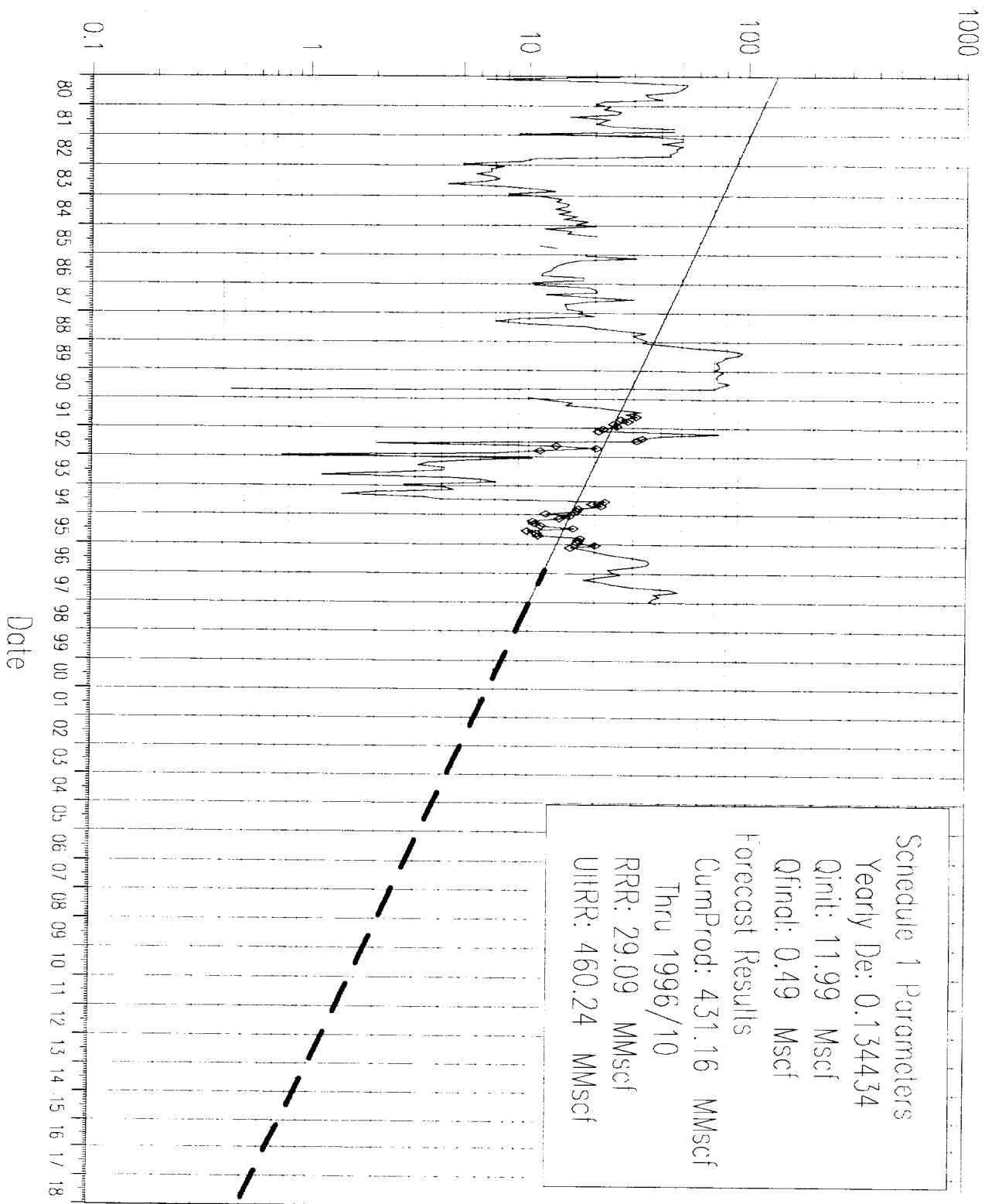
1. MIRU pulling unit.
2. POH with old rods and old pump. NU BOP.
3. ND BOP. RIH with new pump and rods.
4. Space out and clamp off.
5. Hang well on and RDMO pulling unit.
6. Test pump and put back on production.
7. Notify field office personnel of well status.

LEASE : ARROWHEAD GRAYBURG UNIT 168
WELL: FA9789:01 CDATE: 910601



LLASF : ARROWHEAD GRAYBURG UNIT 168

WELL: FA9789:01 CDATE: 910601



DATE	OIL Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
8701	170	0.00	327	0.00
8702	157	0.00	523	0.00
8703	186	0.00	626	0.00
8704	176	0.00	615	0.00
8705	165	0.00	369	0.00
8706	201	0.00	549	0.00
8707	178	0.00	920	0.00
8708	202	0.00	566	0.00
8709	173	0.00	435	0.00
8710	199	0.00	457	0.00
8711	204	0.00	445	0.00
8712	182	0.00	542	0.00
8801	208	0.00	521	0.00
8802	223	0.00	571	0.00
8803	99	0.00	279	0.00
8804	318	0.00	211	0.00
8805	395	0.00	297	0.00
8806	513	0.00	547	0.00
8807	1084	0.00	625	0.00
8808	1420	0.00	815	0.00
8809	1327	0.00	1020	0.00
8810	1372	0.00	921	0.00
8811	1349	0.00	947	0.00
8812	1306	0.00	1067	0.00
8901	1111	0.00	1021	0.00
8902	706	0.00	1179	0.00
8903	398	0.00	1729	0.00
8904	610	0.00	2422	0.00
8905	990	0.00	2924	0.00
8906	957	0.00	2717	0.00
8907	822	0.00	2435	0.00
8908	965	0.00	2364	0.00
8909	1021	0.00	2148	0.00
8910	1008	0.00	2271	0.00
8911	920	0.00	2226	0.00
8912	900	0.00	2198	0.00
9001	609	0.00	2394	0.00
9002	508	0.00	2049	0.00
9003	556	0.00	2213	0.00
9004	557	0.00	2166	0.00
9005	571	0.00	2255	0.00
9006	516	0.00	2477	0.00
9007	386	0.00	2295	0.00
9008	292	0.00	2169	0.00
9009	0	0.00	13	0.00
9010	0	0.00	0	0.00
9011	0	0.00	0	0.00
9012	0	0.00	308	0.00
9101	148	0.00	378	0.00
9102	276	0.00	442	0.00

DATE	Oil Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
9103	302	0.00	456	0.00
9104	531	0.00	618	0.00
9105	632	0.00	785	0.00
9106	540	0.00	975	0.00
9107	483	0.00	856	0.00
9108	579	0.00	965	0.00
9109	534	0.00	794	0.00
9110	534	0.00	883	0.00
9111	503	0.00	738	0.00
9112	604	0.00	786	0.00
9201	499	0.00	681	0.00
9202	530	0.00	609	0.00
9203	751	0.00	2287	0.00
9204	619	0.00	1208	0.00
9205	506	0.00	1026	0.00
9206	576	0.00	940	0.00
9207	445	0.00	63	0.00
9208	319	0.00	417	0.00
9209	313	0.00	615	0.00
9210	349	0.00	352	0.00
9211	198	0.00	220	0.00
9212	74	0.00	23	0.00
9301	197	0.00	322	0.00
9302	107	0.00	143	0.00
9303	19	0.00	107	0.00
9304	50	0.00	93	0.00
9305	51	0.00	127	0.00
9306	33	0.00	123	0.00
9307	30	0.00	73	0.00
9308	7	0.00	35	0.00
9309	30	0.00	134	0.00
9310	31	0.00	187	0.00
9311	46	0.00	213	0.00
9312	66	0.00	83	0.00
9401	65	0.00	127	0.00
9402	66	0.00	127	0.00
9403	90	0.00	62	0.00
9404	87	0.00	42	0.00
9405	85	0.00	103	0.00
9406	83	0.00	117	0.00
9407	84	0.00	697	0.00
9408	64	0.00	611	0.00
9409	70	0.00	648	0.00
9410	105	0.00	528	0.00
9411	114	0.00	503	0.00
9412	129	0.00	375	0.00
9501	144	0.00	480	0.00
9502	160	0.00	391	0.00
9503	212	0.00	328	0.00
9504	216	0.00	323	0.00

DATE	DATE	Oil Vol Prod bbls	Forecasted Oil Volume bbls	Gas Vol Prod Mscf	Forecasted Gas Volume Mscf
9901	9505	326	0.00	356	0.00
9901	9506	324	0.00	484	0.00
9901	9507	410	0.00	308	0.00
9901	9508	445	0.00	342	0.00
9901	9509	419	0.00	335	0.00
9901	9510	641	0.00	538	0.00
1000	9511	668	0.00	512	0.00
1000	9512	750	0.00	525	0.00
1000	9601	822	0.00	629	0.00
1000	9602	801	0.00	455	0.00
1000	9603	941	0.00	571	0.00
1000	9604	943	0.00	623	0.00
1000	9605	1089	0.00	733	0.00
1000	9606	1127	0.00	881	0.00
1000	9607	1374	0.00	1072	0.00
1000	9608	1374	0.00	1108	0.00
1000	9609	1281	0.00	1032	0.00
1000	9610	1351	236.45	921	0.00
1001	9611	1156	225.71	693	0.00
1001	9612	1292	230.05	743	357.54
1001	9701	1315	226.91	815	365.04
1001	9702	1000	202.16	592	360.68
1001	9703	839	220.77	556	321.88
1001	9704	1342	210.73	653	352.10
1001	9705	1481	214.79	743	336.67
1001	9706	1423	205.03	868	343.73
1001	9707	1397	208.97	1360	328.67
1001	9708	1577	206.12	1495	335.56
1001	9709	1528	196.75	1495	331.55
1001	9710	1475	200.54	1119	317.02
1002	9711	1376	191.42	1116	323.67
1002	9712	1528	195.11	1105	309.48
1002	9801	1516	192.45	1189	315.97
1002	9802	1361	171.45	0	312.19
1002	9803	0	187.24	0	278.61
1002	9804	0	178.72	0	304.77
1002	9805	0	182.16	0	291.41
1002	9806	0	173.88	0	297.52
1002	9807	0	177.23	0	284.48
1002	9808	0	174.81	0	290.45
1002	9809	0	166.87	0	286.98
1002	9810	0	170.08	0	274.40
1003	9811	0	162.35	0	280.15
1003	9812	0	165.47	0	267.87
1003	9901	0	163.22	0	273.49
1003	9902	0	145.41	0	270.22
1003	9903	0	158.80	0	241.15
1003	9904	0	151.58	0	263.80
1003	9905	0	154.50	0	252.24
1003	9906	0	147.47	0	257.53
1003				0	246.24

DATE	OIL Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
10711	0	36.86	0	73.05
10712	0	37.57	0	74.58
10801	0	37.05	0	73.69
10802	0	34.19	0	68.11
10803	0	36.05	0	71.94
10804	0	34.41	0	68.79
10805	0	35.07	0	70.23
10806	0	33.48	0	67.15
10807	0	34.12	0	68.56
10808	0	33.66	0	67.74
10809	0	32.13	0	64.77
10810	0	32.75	0	66.13
10811	0	31.26	0	63.23
10812	0	31.86	0	64.56
10901	0	31.43	0	63.79
10902	0	28.00	0	56.92
10903	0	30.58	0	62.27
10904	0	29.19	0	59.54
10905	0	29.75	0	60.79
10906	0	28.40	0	58.12
10907	0	28.94	0	59.34
10908	0	28.55	0	58.63
10909	0	27.25	0	56.06
10910	0	27.77	0	57.24
10911	0	26.51	0	54.73
10912	0	27.02	0	55.88
11001	0	26.65	0	55.21
11002	0	23.75	0	49.27
11003	0	25.93	0	53.90
11004	0	24.75	0	51.54
11005	0	25.23	0	52.62
11006	0	24.08	0	50.31
11007	0	24.55	0	51.37
11008	0	24.21	0	50.75
11009	0	23.11	0	48.53
11010	0	23.56	0	49.54
11011	0	22.48	0	47.37
11012	0	22.92	0	48.37
11101	0	22.61	0	47.79
11102	0	20.14	0	42.65
11103	0	21.99	0	46.65
11104	0	20.99	0	44.61
11105	0	21.40	0	45.54
11106	0	20.42	0	43.55
11107	0	20.82	0	44.46
11108	0	20.53	0	43.93
11109	0	19.60	0	42.00
11110	0	19.98	0	42.88
11111	0	19.07	0	41.00
11112	0	19.44	0	41.86

DATE	OIL Vol Prod bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
11201	0	19.17	0	41.36
11202	0	17.69	0	38.23
11203	0	18.65	0	40.38
11204	0	17.80	0	38.61
11205	0	18.15	0	39.42
11206	0	17.32	0	37.69
11207	0	17.66	0	38.48
11208	0	17.42	0	38.02
11209	0	16.62	0	36.36
11210	0	16.94	0	37.12
11211	0	16.17	0	35.49
11212	0	16.48	0	36.24
11301	0	16.26	0	35.80
11302	0	14.49	0	31.95
11303	0	15.82	0	34.95
11304	0	15.10	0	33.42
11305	0	15.39	0	34.12
11306	0	14.69	0	32.63
11307	0	14.97	0	33.31
11308	0	14.77	0	32.91
11309	0	14.10	0	31.47
11310	0	14.37	0	32.13
11311	0	13.72	0	30.72
11312	0	13.98	0	31.37
11401	0	13.79	0	30.99
11402	0	12.29	0	27.66
11403	0	13.42	0	30.25
11404	0	12.81	0	28.93
11405	0	13.05	0	29.53
11406	0	12.46	0	28.24
11407	0	12.70	0	28.83
11408	0	12.53	0	28.49
11409	0	11.96	0	27.24
11410	0	12.19	0	27.81
11411	0	11.63	0	26.59
11412	0	11.86	0	27.15
11501	0	11.70	0	26.82
11502	0	10.42	0	23.94
11503	0	11.38	0	26.19
11504	0	10.86	0	25.04
11505	0	11.07	0	25.56
11506	0	10.57	0	24.44
11507	0	10.77	0	24.96
11508	0	10.62	0	24.66
11509	0	10.14	0	23.58
11510	0	10.34	0	24.07
11511	0	9.87	0	23.02
11512	0	10.06	0	23.50
11601	0	9.92	0	23.22
11602	0	9.15	0	21.46

DATE	Oil Prod Vol bbls	FORECASTED OIL VOLUME bbls	Gas Vol Prod Mscf	FORECASTED GAS VOLUME Mscf
11603	0	9.65	0	22.67
11604	0	9.21	0	21.67
11605	0	9.39	0	22.13
11606	0	8.96	0	21.16
11607	0	9.13	0	21.60
11608	0	9.01	0	21.34
11609	0	8.60	0	20.41
11610	0	8.77	0	20.84
11611	0	8.37	0	19.92
11612	0	8.53	0	20.34
11701	0	8.41	0	20.10
11702	0	7.49	0	17.93
11703	0	8.18	0	19.62
11704	0	7.81	0	18.76
11705	0	7.96	0	19.15
11706	0	7.60	0	18.31
11707	0	7.75	0	18.70
11708	0	7.64	0	18.47
11709	0	7.29	0	17.66
11710	0	7.43	0	18.03
11711	0	7.10	0	17.24
11712	0	7.23	0	17.61
11801	0	7.13	0	17.40
11802	0	6.36	0	15.52
11803	0	6.94	0	16.98
11804	0	6.63	0	16.24
11805	0	6.75	0	16.58
11806	0	6.45	0	15.85
11807	0	6.57	0	16.18
11808	0	6.48	0	15.99
11809	0	6.19	0	15.29
11810	0	6.31	0	15.61
11811	0	6.02	0	14.93
11812	0	6.13	0	15.24